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THE TRANSIT OF CIVILIZATION

THE transmission of cultural elements from one people to another is one of the most fascinating aspects of the study of history—a process which our nineteenth-century historian and novelist Edward Eggleston aptly dubbed the “transit of civilization.” We Americans have been especially concerned with the form which this process took in this country and with the special influence which frontier conditions had upon it. Sixty years ago Frederick Jackson Turner founded one of the most productive schools of American historiography upon a reaction against the excessive emphasis upon European origins and the concomitant neglect of the American development and adaptation of that heritage. More recently other American historians, notably those concerned particularly with the history of immigrant groups, have helped to restore our sense of the continuing process of cultural transmission and

so to correct Turner’s corrective. In a day when to label a proposal “un-American” is, for some unthinking people, to damn it without further examination, we could do nothing better in our historical instruction than to study the genesis and development of some of our most characteristically American ideas and institutions as examples of this process of cultural interaction.

Education today in Germany But that the process of cultural transmission is not a “one-way street” is well brought out by

Vaughn R. DeLong’s “German Education in Transition” in the *Department of State Field Reporter* for November–December, 1952. After summarizing a few of the well-known facts about the indebtedness of American to German education before 1914, Mr. DeLong describes some of the major influences which American educators have had upon West German educa-

tion since 1945. There, after the necessary but negative work of denazification of teachers and of textbooks had been done, "school reform" became the slogan under which Americans sought to bring about desirable changes in the thinking and practices of German educators. Among these developments were the following: aiding in the provision of new and renovated school buildings; making free textbooks available; introducing the concept of the "social studies" to reorient the almost exclusively historical approach to this field; extending somewhat the scope of free schooling and the length of the common or unified school; increasing the amount and raising the quality of vocational guidance and of health services; establishing student councils in secondary schools; and enlisting the active cooperation of parents in dealing with educational problems. Notably effective as means for stimulating these changes were the use of American educators, the bringing to the United States of representative German teachers and students, the establishment of libraries where extensive information about American life and education was available; and the use, periodically, of the educational workshop. Mr. DeLong believes that today "there is a steady, if slow, movement away from authoritarianism" in German education.

A less optimistic view of German "school reform" and of American cultural relations abroad has been stated by G. Robert Koopman, associate

superintendent of public instruction in the state of Michigan and formerly chief of the Education and Cultural Relations Division Office of the U.S. High Commissioner in Germany, in the *Nation's Schools* (December, 1952) and in *Phi Delta Kappan* and *Educational Leadership* (February, 1953). Basically, Mr. Koopman thinks that we "missed the boat" in leaving high policy determinations in the cultural field to military and, later, to State Department career-men who "saw the cultural program as either a tool for carrying out political objectives or as a necessary evil—usually the latter." As a remedy Mr. Koopman makes three major proposals: (1) "a program of international cultural relations which will be democratic, sincere, overt, co-planned with the cultural agencies, in accordance with the principles of cultural anthropology, and completely independent of information, propaganda, and psychological warfare programs"; (2) a new personnel program which would staff cultural programs with professional educators; and (3) the encouragement of close relations between unofficial cultural agencies in this country with their counterparts in foreign lands.

Those who are interested in a short, systematic survey of contemporary education in Western Germany will find rewarding *Education in Western Germany* by Dr. Hans Wenke, professor of pedagogy and philosophy at the University of Tübingen (Washington: Library of Congress Reference Department, European Affairs Division,

1953. \$1.00). From this report it is clear that neither the aims nor the structure of German education have been fundamentally changed in the past few years but that German educators have been stimulated to correct weaknesses long apparent to some of them and to select rather discriminately from the suggestions which we (and others) have offered them. Professor Wenke also makes clear, in passing, the vast difference between educational reform in Western Germany and the "cultural imperialism," among other kinds, characteristic of Eastern Germany under the Communist regime.

Wenke's discussion of the problem of providing Germans with an adequate political education from the universities down is especially interesting. Today "the setting-up of chairs for a field of knowledge that is by no means identical with, but corresponds to, the American concept of political science proceeds apace in all the Länder of Western Germany." Truly here is a case of "bread upon the waters" returning after many days: American political science owed much in its beginnings to the inspiration of German jurists, and the discussion of political education in secondary schools has been quite lively in recent German educational writing. Professor Wenke ends his survey with descriptions of teacher training and of institutions of educational research in Western Germany.

Last April one of the latter, the new Institute for Educational Research in

Frankfurt am Main, held a conference on European education which called upon Western European educators to stress, in the education of European children, their "common achievements and enterprises" and to work specifically toward overcoming "racial, religious, national, social, and other prejudices of all kinds" (*Bildung und Erziehung*, April-May, 1953).

The preceding May an even more interesting conference of German and American history teachers had been held at Braunschweig (Brunswick) to eliminate, so far as possible, nationalistic distortions in history textbooks. Americans pointed out serious omissions and errors in German history books about the United States, and German historians performed a similar service for the Americans. The emphases which the Americans wished to see in German treatment of our history included the following: American achievements in culture (in addition to "jazz"); a positive understanding of democracy as understood and practiced here and as embodied in some of our great leaders; the significance for the world of our ethnic diversity; and the twin concepts of the influence of the frontier and of the continuing cultural interaction between the United States and Europe. Perhaps the keynote of the conference was best expressed by A. St. Langeland, of Oslo:

In this work of ours we really get into a sort of dilemma. When I was . . . trying to explain the Norwegian point of view, I could not help noticing that somewhere in my mind a nationalistic devil was at work. . . .

Perhaps we had better be aware of this danger and keep our heads cool both ways—not allow ourselves to become nationalistic in our parts as critics, and not to be too apt to drop our convictions in order to obtain an artificial mutual understanding.

An excellent account of this conference written by Professor Robert LaFollette, of Ball State Teachers College, appeared in *Social Education* last May; for the full proceedings, see the second volume of the *Internationales Jahrbuch für Geschichtsunterricht* (Braunschweig: Albert Limbach Verlag, 1953. \$1.50).

Education in other countries Harried administrators and teachers in American schools will learn from the latest *International Yearbook of Education* (Paris: UNESCO [and] Geneva: International Bureau of Education, 1952) that their problems are almost universal:

Almost throughout the world educational costs rose [for the school year 1951-52] . . . enrolments increased at all levels, teachers and buildings were in short supply, and structural changes were being made at [the] secondary level. . . .

[Buildings] are becoming more and more inadequate in relation to the rising scale of needs.

More detailed descriptions and interpretation of other educational systems than our own may be found in several 1952 bulletins issued by the United States Office of Education. In Bulletin 17, *Education in Sweden*, Alina M. Lindegren of the Office discusses the admirable educational system of Sweden, which has recently embarked with vigor and intelligence

upon a long-term "educational reform." The even more interesting story of an educational system which has been built substantially within the past half-century is told in Abdul H. K. Sassani's *Education in Turkey* (Bulletin 1952, No. 10). Particularly useful would be a more detailed account of the way in which the influence of John Dewey upon the elementary-school, and of the French lycée upon the secondary-school, systems have been harmonized (if they have) in this progressive Near Eastern country. *Higher Education in France* (Bulletin 1952, No. 6) by Edith Kahler is a useful handbook of information, without much description or any interpretation, for American students who plan to study in French universities.

Exchange-student program Recently the Institute of International Education (1 East Sixty-seventh Street, New York 21) set up an "alumni office" to re-establish contact with American students who have gone abroad and with men and women from nearly eighty countries who once studied in American colleges and universities in scholarship programs administered by the Institute. The study of the later careers of these "alumni" will, it is hoped, give some indication of the efficacy of the exchange-of-persons programs in contributing to international understanding and so influence such programs in the future.

During 1952 the Institute supervised the study in 469 American col-

leges and universities of 2,960 foreign-scholarship students from 80 countries and arranged for the placement of almost as many more. The Institute recommended 817 American graduate students for United States Fulbright scholarships to 18 countries in the same year.

Despite our admitted imperfections educationally, the United States is not far today from occupying the place, in relation to "underdeveloped" countries today, which Germany occupied a century ago. The "transit of civilization" goes on.

COMMUNISM IN EDUCATION

SLIGHT as is the influence of communism in American education, such influence constitutes a tremendous, and probably a growing, problem in many parts of the non-Communist world. When Communist organizations, "fronts," and propaganda are combined with grinding poverty for the vast majority of the people, with a virulent anti-Western complex of attitudes on the part of colonial and recently independent non-Caucasians, with a condition of illiteracy and half-literacy of peasant populations, and with a growing "educated proletariat" competing for a few jobs in government service, the threat of an advancing Communist movement is certainly no "red herring."

Reports on other continents Such are the reflections aroused by reading, in issues of the *Educational Record* since October, 1952 the careful reports of the travels

and investigations of Walter Crosby Eells in Southeast Asia, Australasia, India, Ceylon, Pakistan, and Africa. In these lands the recent situation varies from the extreme of official governmental "neutrality" in strife-torn Burma to "no known Communists" in Formosa, where death is the penalty for such affiliation. But in most of these countries Communist organizations include large numbers, though still a minority, of university students, some from the lower schools, and a few teachers. Where living standards are highest, as in New Zealand and Australia, Communist influence is weak (except in New South Wales); in Ceylon it is described as "vociferous but ineffective." Where living conditions are marginal for so many, and where anti-Western attitudes are widespread, as in Indonesia, India, and Egypt, the Communists seem to be doing all too well in stirring up trouble over real and alleged grievances. The fact that, politically, communism has made most headway in Travancore-Cochin, the most literate state of India, is especially disturbing.

To Mr. Eells the demonstrations against low scholarships and salaries, the use of local grievances, such as the language issue in East Pakistan, to incite riots, and the propaganda work in the villages required of Communist and would-be Communist students in India reveal a pattern of influence and action which illuminates Lenin's remark that "the road from Moscow to Paris leads through Peking, Shanghai,

and Calcutta." It is somewhat comforting to hear from Mr. Eells that the United States Information Service was doing a good job in Pakistan and Ceylon to counteract Communist propaganda, but it is also disconcerting to learn that the distribution of this literature was handicapped by the fact that it cost the reader about 100 per cent more than competing Communist publications.

All who are interested in this problem (and who is not?) will look with interest to Mr. Eells' later reports and to his recommendations as to what we can best do in this crucial battle for the minds of a third of mankind.

Communists in our schools In clarifying American educators' thinking on the problem of dealing with the few Communists in American schools—if any are still there—probably no one has made a more significant contribution than Sidney Hook, chairman of the Department of Philosophy at New York University. In his recent book, *Heresy, Yes—Conspiracy, No* (New York: John Day Co., 1953. \$3.75), he has analyzed this vital distinction and its implications for academic and intellectual freedom and has made some positive proposals which avoid the excesses of the two groups whom he dubs "cultural vigilantes" and "ritualistic liberals." Obviously, Professor Hook's theses will not be universally acceptable, but they command respectful attention, and, where disagreement exists, they require well-grounded criticism, not misrepresenta-

tion or neglect. Hook's underlying thesis is that "American institutions have a vitality and a viability which, with a little gumption and intelligence, can effectively meet the threat of totalitarianism from abroad and at home without the loss of our own essential freedoms."

Assuming that our society is a "liberal" one, Professor Hook states that what the realistic liberal fears is "not heresy but conspiracy." By "heresy" Professor Hook means "a set of unpopular ideas or opinions on matters of grave concern to the community":

The right to profess publicly a heresy of any character, on any theme, is an essential element of a liberal society. . . . It is enough that the heretic pays the price of unpopularity which he cannot avoid. . . . A conspiracy, as distinct from a heresy, is a secret or underground movement which seeks to attain its ends not by normal political or educational processes but by playing outside the rules of the game. Because it undermines the conditions which are required in order that doctrines may freely compete for acceptance, because where successful it ruthlessly destroys all heretics and dissenters, a conspiracy cannot be tolerated without self-stultification in a liberal society.

After arguing cogently that membership in the Communist party disqualifies a person for teaching in a free society, Professor Hook proposes that neither the state nor the university administrations but the faculties (on college and university levels) should concern themselves with the establishment of the facts in each case and with the procedures leading to the dismissal of Communist party members. For a non-Communist who misrepresents

established facts in parroting the Communist "line," Hook recommends that "such a man should have his credentials to competent scholarship openly questioned by his peers." To what extent such measures might be effective below the college level is not discussed by Professor Hook. Some who would agree with his prescriptions for higher education might look for remedy to administrative action, properly safeguarded, in the schools.

The views of the President Newspaper reports about the experiences of some of our soldiers in Communist prison camps underscore the need for American young men to understand communism before they enter military service. My own view of this issue was adequately stated in this section of the *School Review* in October, 1951. The following excerpts from President Eisenhower's letter of last June to Robert B. Downs, president of the American Library Association (*ALA Bulletin* for July-August, 1953) give support to those who would keep the channels of information open:

... we must in these times be intelligently alert not only to the fanatic cunning of Communist conspiracy—but also to the grave dangers in meeting fanaticism with ignorance. For, in order to fight totalitarians who exploit the ways of freedom to serve their own ends, there are some zealots who—with more wrath than wisdom—would adopt a strangely unintelligent course. They would try to deny freedom by denying freedom's friends the opportunity of studying communism in its entirety—its plausibilities, its falsities, its weaknesses.

But we know that freedom cannot be

served by the devices of the tyrant. As it is an ancient truth that freedom cannot be legislated into existence, so it is no less obvious that freedom cannot be censored into existence. And any who act as if freedom's defenses are to be found in suppression and suspicion and fear confess a doctrine that is alien to America.

The libraries of America are and must ever remain the homes of free, inquiring minds. To them, our citizens—of all ages and races, of all creeds and political persuasions—must ever be able to turn with clear confidence that there they can freely seek the whole truth, unwarped by fashion and uncompromised by expediency. For in such whole and healthy knowledge alone are to be found and understood those majestic truths of man's nature and destiny that prove, to each succeeding generation, the validity of freedom.

EDUCATION IN WORLD AFFAIRS

THE overwhelming importance of education in world affairs is underlined by the devotion to this topic of the July-August issue of *Adult Leadership* (743 North Wabash Avenue, Chicago 11, Illinois). In this magazine Walter H. C. Laves, the new chairman of the United States National Commission for UNESCO, analyzes the "essentials of international understanding" along lines similar to his earlier analysis summarized in this column in October, 1951. H. Lionel Elvin, the director of the Department of Education of UNESCO, emphasizes that the immediate need is that of giving training in international affairs to key people:

On the national plane I believe that time presses too much for us to wait for universal adult education. In every community let us be content if we get into our classes and

groups the comparative few whose voices may count. Let the doors be open to everyone, with an equal welcome for all. But let us not be downcast if fewer people come in than will go to a football game.

Other articles go into details on the "what to do" and "how to do it." For any school planning an adult-education program in the international relations field, this issue will be most useful.

Group leaders and teachers in this field on all educational levels will find invaluable the new *United Nations Radio Handbook for Teachers* (New York: United Nations, Department of Public Information, April, 1953). This pamphlet contains a general description of the radio and television developments which publicize UN proceedings, describes briefly the main UN agencies, gives a schedule of its chief broadcasts, and adds suggestions for class use of such programs. Finally, there is an annotated bibliography of available source materials in the form of recordings, films, and printed matter.

For obtaining an understanding of the efforts of the United Nations to help "underdeveloped" countries raise their levels of living—surely an important aspect of a fair and balanced study of the UN—nothing better for both adults and high-school students has appeared than *Sharing Skills: Stories of Technical Assistance* (New York: United Nations, Department of Public Information, 1953. \$0.35). Here are twelve case studies which tell interestingly who did what to help

whom. More important, this booklet clarifies two points often misunderstood.

First, technical assistance need not, in many cases, involve large-scale foreign capital gifts or loans. For example, American tractors and combines simply would not fit the geographical, economic, and social conditions of agriculture in most of Afghanistan. But the wide use there of an improved scythe in place of a primitive sickle followed demonstrations by Swiss and Austrian experts and resulted in an Afghan being sent to Switzerland for a year's training in the use of hand tools. And the scythes can now be produced by Afghan blacksmiths for local use.

Another point which is often misunderstood follows from the assumption that technical assistance flows only from the "developed" to the "underdeveloped" countries. But actually, up to October, 1952, a thousand experts had gone out from sixty-one nations, a minority of which would be called "developed." Here we have, rather, a joint pooling of skills. One of the best examples is the spread of Indonesian methods of fish-farming to Thailand, Israel, and Haiti under the auspices of the Food and Agricultural Organization of the United Nations. The same point is illustrated by the fact that the three FAO experts fighting rinderpest in Ethiopia since 1948 come from Chile, Australia, and Korea.

Round the World with a Postage Stamp: A Booklet for Teachers and

Children about the Universal Postal Union describes the work of one of the oldest and the most nearly universal international governmental organizations. Informative and well-written, it is, despite its title, probably most useful on the high-school level in this country. Chapter titles include the following: "The Post," "The Postage Stamp," "The Letter's Journey," "Postal Services," "The Universal Postal Union," and "The International Bureau of the Universal Postal Union." Published as Number 12 in the UNESCO series "Towards World Understanding," this pamphlet and other UNESCO publications are available through the International Document Service, Columbia University Press, 2960 Broadway, New York 27, New York.

In using such materials, as I pointed out a year ago in these pages of the *School Review*, the teacher must not lay himself open to legitimate criticisms of "stacking the deck" on one side or of making the study of the United Nations the sum of significant teaching about international relations. Given a fair approach and a truly critical point of view in the classroom, these materials are valuable, when properly supplemented. As the Educational Policies Commission said a year ago (in *The United Nations, UNESCO, and American Schools*):

Young Americans, as part of their education for citizenship, should have opportunities to learn in school why their country is following a policy of international co-operation, how that policy works, and what it

means to have their country a member of the UN and UNESCO. Teaching about such things is an obligation resting upon all public schools in the United States.

The Commission then acknowledged the undoubted right of American citizens to change our national policy toward the United Nations but added:

Those who would have the schools suppress the facts of history as they relate to the UN and UNESCO or would have the schools teach a particular point of view about these organizations are in a position that is indefensible in terms of American principles.

Presumably the Commission meant by "teach a particular point of view" the presentation of one view only, or of one view as the only legitimate view to take on *policy*; certainly no teaching about the United Nations which neglected to consider its weaknesses and major criticisms thereof could be called adequate any more than one which failed to point out its accomplishments.

A similar point is raised by the resolution passed last March by the Association for Higher Education which urged "all members of the academic profession to make greater efforts to interest all students in the importance and responsibilities of participation and leadership in the world community, and in the understanding of the principles and objectives of the United Nations, its subsidiary agencies, such as UNESCO in that world community." To this statement the "structure and functioning" of these bodies should have been added to

avoid teaching students the kind of unrealistic naïveté which comes from looking only at high-sounding objectives to the exclusion of their institutional embodiment. Furthermore, such realistic study must face up to the question of how much "community" there is in the "world community" today.

THE SOCIAL STUDIES

*Non-text-
book mate-
rials for
the student* An attempt to "make
world history memo-
rable" and interesting is
found in *News of the
World: A History of the*

World in Newspaper Style by Sylvan Hoffmann and C. Hartley Grattan (New York: Prentice-Hall, Inc., 1953. \$3.72). In fifty-two numbers of four pages each, ranging in date from 3000 B.C. to "the present" (in this case, 1951), this work is intended to give "a broad outline of world events . . . in a popular and contemporary style . . . by covering political, cultural, and other newsworthy events." The material is chiefly of a factual nature, with the editorials providing interpretation from the point of view of our own time. Each number is profusely and relevantly illustrated.

The present writer must dissent from Professor Crane Brinton's view expressed in the Foreword that "anything that will bring the story of peoples and events on the international scale to the American people is of extreme value." It seems, rather, that any school materials whose very selection and presentation of items

inoculate the pupils against gaining the point of view of the people described promote the exact antithesis of the historical outlook which, even more than factual knowledge, is one of the greatest lacks and needs in American social education today. Anachronisms abound, for example, one reference to "England" during the Roman imperial period and another to St. Patrick as "an Englishman," among others.

Of course the teacher who is interested only in using this work to stimulate pupils' interest in more conventional materials will find it moderately helpful. And the teacher who wishes students to go to a few actual source readings if time permits—as it usually does not in the typical desiccated world-history course—may stimulate both fun and learning by having students discover for themselves some of the anachronisms and unhistorical "twists" which inhere in this form of presentation.

In the junior college the problem of what to do with non-American history is also a knotty one. Passing over the minority who would solve the problem by eliminating the history, we usually find four alternatives to concentrate on: (1) modern history, (2) the "traditional" "medieval and modern European" history in some more or less modernized form, (3) Western civilization, and (4) world history in a comprehensive sense. Educators who are concerned about helping students get some idea of the ways in which civilizations, in Toynbee's sense, origi-

nate, grow, and pass away must reject at least the first two and look critically at the third solution. On the other hand, if these same teachers wish to get away from the imposition of textbook dogmas through the student use of primary materials, every significant extension of the course in time and space multiplies the pedagogical problem.

The solution worked out by the history staff of the College of the University of Chicago is to concentrate upon significant epochs and movements in the history of classical and Western civilization, to make the primary source readings basic, and to commission their chairman to write a "handbook"—avoiding the taboo word "textbook"—which will give the running narrative and essential structuring with a minimum of interpretation. Through the use of this "handbook" the "inevitable disjointedness and fragmentation" of a course built up solely upon "selected readings" is avoided, yet the freshness of approach and the demands upon the students' analytical and synthesizing abilities provided by the new-style "source method" is maintained. Junior-college teachers who are interested in this approach may well look at the third edition of William H. McNeill's *History Handbook of Western Civilization* (University of Chicago Press, \$4.50 paper cover), which has just appeared. For other approaches which fall into categories 2 and 3 above, the interested reader is referred to two articles in the *Journal of General Education* of 1952

(Ellsworth Faris, Jr., "Do We Want 'World History'?" and Helen S. Mims, "On General Education in Social Science at Harvard" in the July and October issues, respectively).

Marjorie Tallman's *Dictionary of Civics and Government* (New York: Philosophical Library, 1953. \$5.00) is a useful addition to the high-school library for classes in government, social problems, and, to a lesser extent, United States history. It is more helpful for specifics (as "Brannan Plan," "Social Security Act") than for such key concepts as "federalism" (which is omitted, though "confederation" appears), or for "due process" or "Universal Military Training," which are treated too summarily. A listing of the "New Deal" agencies under their alphabetical abbreviations, perhaps with cross-references, would have made the work easier to use.

Two other recent publications will be valuable for classes in United States history. *Charters of Freedom* provides schools with readable facsimiles of the Declaration of Independence, the (original) Constitution of the United States, and the (U.S.) Bill of Rights, with a short editorial comment on each. The publication sells for \$0.25 a copy, or in quantities of 500 or more, for \$0.20 each. Checks or money orders should be made payable to the Treasurer of the United States and orders sent to the National Archives, Washington 25, D.C. A sixth edition of Walter Tulley's "The Presidential Recorder" (New London, Connecticut: Arthur C. Croft Publi-

cations. \$1.00 for a minimum order of two copies, \$0.50 for each additional copy) gives a mass of interesting data on our presidential elections from 1789 and on the successful contenders therein.

The "How To Do It" series Much has been said and written about the responsibilities of the schools, and particularly

of teachers of the social studies, to see that the curriculum provides an intelligent and honest treatment of some of the crucial controversial issues which divide our society. Of course we have long dealt in schools with such issues, though not always honestly or intelligently. Usually the weighting has been on the conventional or conservative side, more rarely liberal or radical. For those teachers who scorn both the way of avoidance and that of indoctrination, Number 14 of the "How To Do It" series of the National Council for the Social Studies will be most helpful. In *How To Handle Controversial Issues* Professor Richard E. Gross, of Florida State University, gives good counsel on the criteria for selecting controversial issues to be studied and on the classroom techniques appropriate to their use. His criteria may be summarized as follows:

1. Is this issue within the maturity level of the pupils?

2. Is this issue of interest to the pupils? Professor Gross then suggests that, if the issue meets the other six criteria satisfactorily, the teacher should stimulate proper motivation on the part of the students.

3. Is this issue socially significant and timely for this course and grade level? Here problems of vertical and horizontal articulation enter in if undesirable duplications and gaps are not to appear in the school's curriculum.

4. Is this issue one which the teacher feels he can handle successfully from a personal standpoint (either of preparation or of personal bias)?

5. Is this issue one for which we have or can obtain (in time) adequate study materials?

6. Is this an issue for which we have adequate time? Not much can be learned in one day's exchange of mutual ignorance.

7. Is this issue one which will clash (too greatly) with community customs and attitudes? To meet this problem Professor Gross suggests the use, on occasion, of a "backdoor approach" through analogous historical problems or the analogy of a less controversial group which illustrates the same principle, as Japanese-Americans to illustrate problems of ethnic minorities in the South.

Finally, this writer would indorse emphatically Professor Gross's admonition to teachers that, on some issues, the normal result will be, not complete consensus on policy by equally well-informed people, but compromise. Here Professor Gross suggests that "the teacher should help the groups to discover common elements and values which both accept." Further discussion will probably bring about sufficient modification of views so that each side will see more objectively the reasons for the opposition of the other to its favored policy. "This democratic means of the creative solution of conflict, characterized by the mutual reconstruction of differing points of view, needs to become a

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common experience for all young people throughout their elementary- and secondary-school careers." And, one might add, most of us teachers will find such a process personally educative as well.

In this same series geography teachers, especially on the elementary-school level, will find relevant to their work Number 15, *How To Introduce Maps and Globes* by Gertrude Whipple, and all social-studies teachers can make use of Number 16, *How To Use Multiple Books* by Mary C. Wilson.

Education of social-studies teachers Recent innovations and current trends in the education of social-studies teachers are well summarized in *The Teacher of the Social Studies*, Twenty-third Yearbook of the National Council for the Social Studies edited by Jack Allen. In eight chapters, each with a short bibliography, are discussed the following topics: successful teaching (I. James Quillen); the preparation of elementary (Harold D. Drummond), secondary (Alice W. Spieseke), and college (Horace T. Morse) teachers; the social-studies classroom (Dorothy McClure Fraser); the teacher in school and community (Jonathan C. McLendon); professional growth (Edwin R. Carr and Robert G. Risinger); and professional activities (Merrill F. Hartshorn and Burr W. Phillips). Among the significant pace-setting developments heralded here are added emphasis in teacher education upon competently guided travel and upon

work with children in out-of-school situations, the influence upon teacher preparation of general-education programs in the college curriculum and of broadened programs of graduate work, and the growing importance of the activities of social-studies councils on local, state, and national levels.

Lecture vs. discussion A refreshing and important contribution to the literature on the perennial issue of lectures versus discussion in collegiate education is reported by Professor Ben S. Bloom, of the Department of Education of the University of Chicago, in the *Journal of General Education* for April, 1953. Instead of following the usual procedure of testing to see what and how much was learned by students, Professor Bloom used the method of *stimulated recall* to get at the thoughts of students which occurred during lectures and discussions in selected classes (in large part in the social sciences) in the College of the University of Chicago. Through the use of recordings used within two days after the class had been held, Professor Bloom furnished cues which helped the students to recall their thoughts in the original situation. As a result of his checking of the recall of overt events, Professor Bloom concludes that "the accuracy of the recall of conscious thoughts is high enough for most studies of learning situations—if the interviews are made within a short time after the event."

From these studies Professor Bloom concludes that "the lecture is espe-

cially successful in securing the attention of students to what is being said" and that it "evokes primarily those thoughts which are appropriate to the following and comprehending of information, while the discussion is more successful in evoking complex problem-solving types of thought." However, the study shows also that the average discussion still has a long way to go to secure the maximal amount of problem-solving:

All this suggests that if the objective of education is the development of knowledge about a topic or field, the lecture is a far more efficient method of communicating such knowledge and of securing the attention

of students to these ideas than is the discussion. However, if the objective is the development of abilities and skills which are problem-solving in nature, the least efficient discussion is superior to most . . . lectures.

Such discrimination between means according to the ends to be served may have implications for both experimentation and practice on the high-school level, though such practice and experimentation might well be preceded by more precise definitions of *lecture* and of *discussion* than are often given the terms.

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Shimer College

WHO'S WHO FOR NOVEMBER

Authors of news notes and articles The news notes in this issue have been prepared by ROBERT E. KEOHANE, chairman of the Department of Social Sciences, Shimer College, Mount Carroll, Illinois. WARREN C. SEYFERT, associate professor of education, and director of the Laboratory School, at the University of Chicago, describes how the faculty of his school, through a variety of procedures, co-operatively helps to develop school policies and practices. JOSEPH JUSTMAN, research assistant at the Bureau of Educational Research of the New York City Board of Education, compares the personal and social adjustment of paired superior pupils in special-progress classes and in normal-progress classes. LEONARD V. KOOS, professor of education at the University of Chicago, in the second of two articles on junior high school reorganization, surveys the educational needs which the junior high

school was designed to meet and the ways in which the school was set up to meet these needs. THOMAS F. HOGAN, social-studies teacher in the Grasmere School, Fairfield, Connecticut, describes the insights into word usage obtained by seventh- and eighth-grade pupils through a school Semantics Club. FRANCES SWINEFORD, head of the Test Analysis Section of the Department of Statistical Analysis of the Educational Testing Service, Princeton, New Jersey, presents a list of selected references on statistics, the theory of test construction, and factor analysis.

Reviewers of books C. LESLIE CUSHMAN, associate superintendent of schools, Philadelphia, Pennsylvania. JOHN WITHALL, associate professor of education, University of Delaware. EDNA LUE FURNESS, associate professor of education, University of Wyoming.

EXPERIENCES IN FACULTY SELF-DETERMINATION

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How the faculty of one school co-operatively develops school policies and practices is described in this article. Few, if any, of the procedures employed are unique to the school, but the variety of methods employed is unusual. Because of this variety and because the collaborative approach seems to have been successful in one school, it may be that other schools can benefit from a sharing of its experiences.

The setting is the Laboratory School of the University of Chicago. The faculty numbers about seventy-five. The student body ranges from four-year-olds to tenth-graders. The administrative staff consists of the director and the assistant to the director. Unlike practice in many schools, there are no supervisors in the various instructional areas. As far as teaching load is concerned, teachers in the Laboratory School have more moderate assignments than those in many public schools, although the loads are by no means light. The climate of the school admittedly is favorable to collaborative work on the part of teachers. The climate alone is not

enough: means of implementation must also be available.

BASIC ASSUMPTIONS UNDERLYING THE PLAN

Although it is unnecessary here to develop completely the reasons underlying the emphasis which is given to faculty self-determination in the Laboratory School, a statement of some of the basic assumptions is in order. The faculty of the school believes that (1) the worth of an idea is to be judged by its inherent validity rather than by the status of the person advancing it; (2) the pooling of ideas from a number of sources generally produces sounder conclusions than those any one person can develop; (3) implementation is more effective when the persons who are affected by a decision participate in making it; (4) leadership potential in a faculty is widespread rather than narrowly concentrated; (5) communication, which is essential to group action, is promoted by collaborative endeavor; (6) co-operative problem-solving is, generally speaking, the most productive means of quickening professional growth; and, last but not

least, (7) co-operative work can be "fun" for everyone.

Although it may seem from the foregoing and from what follows that the director of the Laboratory School is on a kind of extended professional leave of absence, he actually has a significant role to play, even though it differs in some respects from the role commonly played by the head of a school. He is expected to have ideas—and they had better be good ones. He is a co-ordinator, with the special responsibility of keeping all-school objectives in the forefront of faculty thinking. He is an expeditor. He must be a decision-maker when faculty consensus cannot be obtained. Occasionally he must do some prodding.

ORGANIZATION OF LITTLE FACULTY GROUPS

Common experience demonstrates that a faculty as large as seventy-five teachers, covering the grades from kindergarten to Grade X, is too big and too heterogeneous to operate effectively as a group for most purposes. It can do some things, to be sure. For example, it can help to define professional problems; it can provide motivation and guidance for the activities of individuals and small groups; and it can review and act on recommendations which are brought to it. But it simply cannot function as a "working group" for most of the problems with which a faculty must cope. Groups smaller in size and less heterogeneous in the range of their professional responsibilities are needed.

As an aside, it may be noted that general faculty meetings in many schools are the cause of irritation to teachers and administrators alike, in part because those responsible for the meetings try to use them for purposes which are not suitable for so numerous and diverse a group. Merely having all the faculty in one room at one time gives no assurance that all-school interests will be promoted or that widespread involvement of the faculty in problem-solving activities will be secured. To be productive, a group of people, teachers in this case, must be of a size that makes participation by all really possible; the members of the group must have a common interest in whatever task or assignment brings them together; and the group must have authority to make decisions and carry them out.

A common recourse in schools, especially high schools, which are searching for smaller and more congenial working groups is some form of department organization. Departments do have their place in staff organization, but departmental organization has one evident limitation: the range of concern is unduly narrow. This is not said by way of condemnation; it is merely one of the facts of life. Furthermore, at the elementary-school level, departmental allegiances are weak or nonexistent. In the Laboratory School, therefore, it seemed neither possible nor wise to turn to departmental groups to provide more satisfactory faculty units.

Five years ago our staff, after con-

sidering a number of structural possibilities, decided to divide itself into four subdivisions, which for lack of better names have come to be known as our "Little Faculties." One of these includes all the teachers working with children in kindergarten through Grade III; another, Grades IV, V, and VI; the third, Grades VII and VIII; and, finally, Grades IX and X. When a teacher has courses which spread across a dividing line, as is true in several instances, he ordinarily joins the faculty representing the major part of his assignment or the group covering his home room if he is an adviser. The grade-groupings which are used possess no special merit. They were chosen because of local convenience and because they would give groups rather similar in size.

Each of the groups includes the several home-room teachers, but it also includes others. For example, the physical-education staff is represented on each Little Faculty; the science department has members on three of the Little Faculties; the school doctor meets with one of the groups; members of our testing staff belong to two faculties; and so on. The point is that, while no Little Faculty is a cross-section or representative sample of the entire faculty, it does bring together teachers and others with a considerable range of interests and types of contacts with children.

At first glance, this setup may seem to involve nothing more than making four schools out of one, which, if it were true, would be a retreat from this faculty's long struggle to make one

school out of two (elementary and high school). Although the danger does exist that subdivisions such as these may become essentially autonomous units or fragments, this outcome is not necessary if the possibility is foreseen and guarded against. The preventive measures taken by the Laboratory School faculty can be inferred from what is to be said next about Little Faculty organization and operation.

Each Little Faculty elects a chairman from among its members. It can be presumed that a small degree of prestige goes with being chosen for this office; but there is no reduction of other assignments, and there is no increase in salary. Moreover, the total faculty has legislated that a chairman may be re-elected but once and is not again eligible for the position until he or she has been out of office at least two years.

The four Little Faculties meet at the same time—during 1953-54, for an hour at the close of school each Monday afternoon—and all staff members are expected to attend these meetings. Regular attendance as a professional obligation was a decision made by the staff, not by the administration. This much can be said about Little Faculty meetings: they are not principal-dominated, since he cannot be in four places at once.

RESPONSIBILITIES AND ACTIVITIES OF LITTLE FACULTIES

Each of the groups is charged with three main responsibilities: (1) coordinating and improving the total

curriculum for boys and girls in the age or grade range covered by that group; (2) helping to solve problems of all-school character; and (3) serving as a point of reference for other staff committees which are working on problems touching more than a single group. What meeting these responsibilities means in actual practice is best shown by items taken from recent agenda:

Grouping of children in Grade I

Criteria for admission of children to the school

Discussion of tenth-grade students who might not be graduated because of failures in coursework

Student behavior in assemblies

Preliminary discussion of emphases in seventh- and eighth-grade programs

Recommendations for revising the present plan for student publications

Problem of tardiness arising during time between classes

Report from the Communications Committee on choice of plan for teaching spelling

How to use a visiting consultant in the area of sex education

Expediting the preparation of reports to parents

Discussion with the school's new psychologist of the functions that he considered to be in his field

Since this article pertains to faculty self-determination and methods of facilitating it, the question may be asked: How are these and other matters put on the agenda? The answer which covers a large number of the items is that faculty members themselves put them there. But items come from other sources as well. The director has questions or problems with

which he needs help. All-school committees want advice or decisions from the total faculty and get it through the Little Faculties (for example, the Assembly Committee wants to check on its plans for a school-wide assembly). The Policy Committee, of which more later, requests the four faculties to consider certain issues. Finally, a substantial amount of faculty business comes up as a logical next step as a group pushes on with discussion of the problems before it.

Other questions, no doubt, arise in the reader's mind. Under the circumstances described here, is there enough significant business to keep these faculties busy in their weekly meetings? There certainly is, although, as would be expected, the pressures on the several faculties may not be equal at all times. Again, does this form of organization insure full and enthusiastic participation by every teacher? Certainly not, for there are individual differences among adults, and all problems are not of equal concern to every faculty member. But we find that the nature and degree of participation under this plan are higher than they were before the plan was initiated.

CO-ORDINATION THROUGH THE POLICY COMMITTEE

What is done to provide a degree of co-ordination of action and commonness of thinking among the four faculties? To the extent that our all-school beliefs as to what is educationally wise are operative, they promote co-ordination. But, frankly, something more tangible is necessary.

One informal but effective means of co-ordination consists in conferences between two faculty chairmen who have found that their faculties are working on common problems. This situation may come to light through the traditional grapevine, but more usually it is discovered when a chairman examines the minutes of the other three faculties. From such conferences may come joint staff meetings, special committees representing two or more faculties, and so on.

A more regular and formal basis for co-ordination among the Little Faculties is the general faculty's Policy Committee. This committee came into being some years ago to provide, as one of its functions, better communication and articulation between the administration and the teaching staff. With the maturing of the committee over the years, its role has been extended. Currently, perhaps its outstanding responsibility is to promote necessary and desirable interrelationships among the various recognized groups within the faculty.

So far as the Little Faculties are concerned, the machinery for developing co-ordination among them consists in having the four faculty chairmen as ex officio members of the Policy Committee. Problems which arise in any one of the faculties and which appear to need, or to be worthy of, broader consideration are frequently brought to the Policy Committee. That committee may then ask the other chairmen to consider the issues with their faculties. The implementa-

tion of decisions made by the Policy Committee is secured by relaying the request for action to the four faculties through their presiding officers.

The independent suspension of the front wheels on modern motor cars makes an interesting parallel at this point. The wheels are free to respond suitably to the variations in the road surface over which they run. At the same time, the major direction of their forward movement is determined by the chassis of the car and its steering mechanism. The Little Faculties are free to meet the special and local needs of the school areas from which they are drawn, but, at the same time, their activities are held together by the Policy Committee and other lines of contact.

The Policy Committee has other responsibilities besides co-ordinating the thinking and activities of the Little Faculties. It assists the director of the school by advising him on matters about which he must make decisions and by bringing to his attention reactions and suggestions from the faculty at large. It serves the faculty by calling the faculty's attention to problems and interests of individuals or groups; by tying together various activities of staff groups; by making decisions on behalf of the staff when time does not permit, or conditions do not require, the canvassing of the entire faculty; and by exercising leadership in developing plans for the faculty's professional study activities.

The Policy Committee has eight elected teacher members (although

legislation allows the number to increase or decrease slightly to avoid awkward or embarrassing circumstances, such as might occur when a member resigns from the faculty or balloting produces ties). As stated, four of the eight members are the chairmen of the four Little Faculties, and the other four are elected at large by the entire faculty. Except as the four chairmen are called upon to act as "communication devices," the committee members are not elected or expected to function as representatives of grades or departments; their effort is to think and act in the best interest of the entire school. The director customarily presides at meetings, and the assistant to the director serves as secretary. Neither is a voting member. It should be said, however, that voting, in the traditional sense of counting "Ayes" and "Nays" is a practice seldom indulged in. The minutes may record that the committee voted thus-and-so—a statement which means that a consensus was reached.

The Policy Committee meets regularly for an hour and a half or more in alternate weeks. The range of its interests and the extent to which it provides faculty determination of faculty action can be best illustrated by noting some of the items which appeared on its agenda during the past year:

Development of school policy on inter-scholastic activities for girls and for seventh- and eighth-grade boys
Improvement of the handling of the textbook library
Pressure of committee meetings on staff members

Safeguarding school and personal property
Planning staff conferences on sex-education program
Scheduling a curriculum work day
Setting schedule for staff meetings
Considering method for evaluating curriculum study program
Reviewing procedures and criteria for admission to school

There is no denying that, on many of the topics taken up by the Policy Committee, the administration has a position and states it as convincingly as possible. What is important, however, is that the honest intent of all concerned is to get the best possible answer for the school, and many times the director thinks he has such an answer but actually has not. While there probably is a legal provision that the head of the school has veto rights, it is the unwritten assumption that, on matters which the Policy Committee accepts as appropriate for its consideration, a group decision is better than that of any individual (including the director). There is no vetoing.

One more remark about the Policy Committee. The group has some of the aspects and functions of the common faculty "executive committee" and of the traditional principal's "cabinet." Yet its range of interest and responsibilities is greater than that of either of these. It is a powerful group, but the precedents which have developed call for the committee's taking no major action without consulting with the faculty or a relevant part thereof. The committee is relatively free to decide when a question is its business and to determine what

is to be done to carry out a decision it has come to. It operates with comparatively few rules and a handful of precedents. This flexible definition of the extent of such a committee's powers and its possibilities could be a source of distress to teachers and administration. If, however, it is assumed that the intention of the group is to act in the best interests of the school, giving the committee broad powers of self-determination seems the only rational thing to do.

SUPPLEMENTARY GROUPS

While much of the policy-making for the school is done through the two organizations which have been described—the Little Faculties and the Policy Committee—it is clear that they cannot satisfy all the needs which the faculty has. One supplementary set of staff groups consists of departmental units in the upper school (Grades VII–X), whose range of activities is that ordinarily associated with subject-field departments.

One important departure from usual practice is that department chairmen in the Laboratory School are chosen by their peers and each appointment is rotated among the membership at the decision of the group. (The precedent in most departments is a two-year term.) From this it can be inferred that the chairman is not an administrative or a supervisory officer but is a “manager” for the group. One significant effect of this arrangement is that within a department the members are more likely to think of

each other as equals than they may when the chairman is a permanently appointed administrative officer. There may be some general limitations to such a plan and, on occasion, there are specific ones; but in our school, at least, the merits appear to outweigh the shortcomings.

A school cannot live by departments alone, and this will be especially true in an elementary school where a permanent departmental organization is either impossible or, if possible, a handicap to smooth operation. There are decisions to be made and responsibilities carried out which neither departments nor the other groups mentioned find appropriate. There are needs which transcend any or all instructional areas or which cut through the faculty on diagonal lines. For example, in the Laboratory School the five teachers and five assistants responsible for the first- and second-grade program meet one afternoon each week to share ideas and to make plans for the education of six- and seven-year olds. In the upper school the advisers at each grade level (ordinarily three teachers) meet on a regular schedule to discuss matters of all-grade importance. A committee consisting of teachers, parents, and students, called the School Life Committee, makes policy and guides practices for the social life of the school. Other faculty groups provide leadership in such matters as building-evacuation, social activities for the staff, and assemblies.

One other area of staff responsibil-

ity in the Laboratory School deserves attention. Each year for some time past, the entire faculty has been divided among a series of committees we call "curriculum study groups." In the strict sense, every faculty is concerned with some aspect of the curriculum; but what we have called curriculum study groups have customarily been set up to take a more extensive or comprehensive view of the instructional program than other existing committees seemed to be in a position to take.

These groups in the Laboratory School have two or three distinguishing features. In the first place, it has come to be taken for granted that every faculty member will belong to one such group each year. Whether such complete membership ought to continue is a question which the Policy Committee reviews each spring, but in recent years there has been agreement that participation to this extent is desirable.

Another characteristic of these groups is that they almost always have members drawn from the full range of the school's grades and instructional areas, although complete representation is never possible. Again, the problems or instructional areas to which the study groups apply their efforts are defined, at least broadly, by the Policy Committee, which bases its decisions on its appraisal of faculty interests and school needs. As with all other staff groups, there is an elected chairman who has a managerial responsibility. Periodically these chair-

men meet with the Policy Committee to check progress, co-ordinate plans, and get advice on future steps. The important consideration here, however, is that each of the study groups is assumed to be capable of guiding itself in large measure.

The curriculum groups over the years have attacked a variety of problems, and it would not be especially helpful here to list them all. It may be useful, nonetheless, to mention a few instances to illustrate the flexible character of this plan of organization. Some years ago, for example, it appeared to all concerned that the staff needed a clearer understanding of what we meant by "good teaching." To meet that need, the faculty was divided into eight heterogeneous groups, each of which undertook first to write out a set of characteristics of a good learning experience. Through conferences among chairmen and other devices, a "definitive" statement for the entire school was eventually prepared. For the remainder of the year, the faculty, through the vehicle of the eight groups, examined its own activities in light of these criteria. Here, then, is an instance of the faculty's studying, in small groups, a single problem which they selected.

Two years ago it appeared to the faculty that we ought to give concentrated attention to our program in the area of communications. After careful deliberation and consultation, the Policy Committee proposed a series of groups to study certain aspects of the problem: communication skills, devel-

opmental reading, reading problems in content areas, basic literature, creative expression, and nonverbal communication. Since it was recognized that our activities in health education also needed examination, a health-education committee was established. As was said before, every teacher was a member of one of these committees, with assignments made by the Policy Committee, largely in the light of personal competences and interests, although other considerations were applied in a few cases.

During 1952-53 the study of essentially the same problems was continued, although immediate objectives were naturally modified. Some assignments were changed for a number of reasons. One committee was dropped. Finally, the upper-school teachers of social studies and mathematics were allowed to withdraw to make explorations in anticipation of a later, more intensive study of these areas.

At its meeting at the close of the last school year, the Policy Committee assessed the progress of our curriculum groups and recommended to the faculty that we shift our attention in the fall. There will be small stand-by committees to follow the implementation of last year's findings. Then everyone in the school concerned with the social-studies program will be organized to begin a school-wide revision of this field. The mathematics department will continue its explorations. The physical-education department will be given time to consolidate the thinking and

planning it has been carrying on. In this design the faculty is exercising the reasonable alternative of using certain existing groups to promote particular interests.

FACULTY PARTICIPATION INCREASED BY THE PLAN

With the possible exception of the department groups, all others that have been mentioned have come into existence in response to the faculty's recognition of problems which need solving. More than that, the urge to set up faculty committees rather than to turn to the administration for solution has grown as the faculty has acquired skill and satisfaction from participating deeply in problem-solving for the school. Again, the particular pattern of current staff organization is the consequence of the faculty's giving thought, not only to pressing problems, but also to the best methods of marshaling the resources of the staff to deal with these problems. One outcome of this concern with method as well as with the task to be accomplished has been the development of what seems to be a comfortable mixture of stability of pattern and flexibility to meet the new or the unforeseen.

The faculty of the Laboratory School at the University of Chicago would be the last to claim that it had found the perfect vehicle for staff participation in the life of the school or that it had identified the ideal level for such participation. Moreover, we

have not surmounted the barriers of insufficient time and other such practical considerations. We recognize varying degrees of skills among our colleagues so far as effective participation is concerned. We know that a committee structure can get in the way of effective communication as well as expedite it. But for all of these and other shortcomings, we are certain that we get better and more convincing solutions to our problems than we would get with a lesser degree of faculty self-determination, and better solutions are what we want. As this pattern of participation has grown, we have also seen the individual teacher grow in his interest in, and active concern for, the rest of the school

which is out of sight of his or her classroom door.

CONCLUDING COMMENT

In closing, one disclaimer is in order. It has been said that such success as we have had in the area of staff participation is to be explained mainly by the quality of the people on the faculty. They are outstanding teachers. The university environment may have some subtle influence on us. We do have our peculiarities, as every school has. But with all of this, the only basic considerations are a point of view and a reasonable determination to be guided by that point of view. These are available to every school in the land.

PERSONAL AND SOCIAL ADJUSTMENT OF INTELLECTUALLY GIFTED ACCELERANTS AND NON-ACCELERANTS IN JUNIOR HIGH SCHOOLS

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Board of Education of the City of New York



VARIOUS DEVICES have been adopted throughout the United States to enable the gifted pupil to progress through the grades more rapidly. The most widely used plan, and the most simple to utilize from an administrative point of view, is double promotion, or grade-skipping. Many communities have instituted multiple-track programs, while others have installed modifications of the Dalton and Winnetka plans as a means of providing for the very superior child. In New York City, as one way of meeting the challenge presented by such children, we have formed special classes in which intellectually gifted pupils complete the normal span of junior high school work in two, rather than three, years. Such classes enrol children with intelligence quotients of 130 and over who show superior academic achievement. Pupils selected for admission must also possess personal characteristics of initiative, enthusiasm, willingness to work, reliability, regular attendance, and capacity for sustained work.

Underlying the introduction of such special-progress classes in the New

York City schools is the assumption that homogeneous groups constitute a better approach to providing a school program which will meet the needs of intellectually gifted pupils than do the more common heterogeneous groups. It has been felt not only that the special class will serve as a medium for stimulating pupils to better academic achievement but that the formation of such groups will make it possible for the school to stimulate the development by pupils of a broad range of interests and to foster the inculcation of sound civic and social attitudes.

Another reason advanced for the organization of special classes grows out of the school's increasing concern with helping pupils to attain better personal and social adjustment. It has been felt that the very superior child, who functions on a level so much higher than that of his less intelligent classmates, will find it difficult to enter into the normal give-and-take of the usual classroom. The gifted child, the argument runs, will find the climate of a special class composed of his intellectual peers more conducive to the de-

velopment of personal and social adequacy.

The present study seeks to assess the part that the special-progress class plays in furthering the personal and social adjustment of intellectually gifted pupils. To be sure, a complete evaluation of the role of such classes in fostering personal and social adjustment would entail a thorough clinical study, requiring a considerable investment in time and psychological personnel. The large number of pupils included in this study made it impossible to undertake a comprehensive evaluation of the adjustment of each child. Rather, group measures of personal and social adjustment, including a standardized group test of personality and a series of sociometric measures, were used.

SUBJECTS OF THE STUDY

Many pupils with intelligence quotients of 130 or higher were denied admission to the special-progress groups because they did not show the necessary academic attainment or because, in the judgment of their teachers, they did not possess the required personal characteristics. In some instances poor attendance, and in others parental disapproval of a program of acceleration, resulted in retention of otherwise acceptable special-progress candidates in normal-progress classes. Thus, it was possible to identify pupils in normal-progress classes who met some or all of the standards set for admission to special-progress groups.

The basic approach utilized in

this study involved a comparison of matched pairs of intellectually gifted pupils drawn from special-progress and from normal-progress classes. Pupils were matched on the following bases: school attended, grade, sex, chronological age, mental age, and intelligence quotient. The Pintner General Ability Test, Intermediate Test, Form B, was utilized as the measure of intellectual status. Groups of ninety-five matched pairs of special-progress and normal-progress pupils were formed, drawn from eleven special-progress and eleven normal-progress classes in nine junior high schools located in comparable middle-class neighborhoods in New York City.

The mean chronological age of the matched pupil pairs in the special-progress and normal-progress groups was 11 years and 10 months. The mean mental ages for the two groups were 15 years and 10.9 months and 15 years and 9.8 months, respectively; the mean intelligence quotients, 134.4 and 134.1, respectively. The differences between the two groups were extremely small, and none was statistically significant.

APPRAISAL INSTRUMENTS

Sociometric techniques lend themselves readily to the determination of pupil status and interrelations in the classroom situation. Three sociometric approaches were utilized in the present study.

1. A Friendship Nomination technique, in which each pupil was asked to select the three classmates he liked best and the three he liked least.

2. A modified form of the Ohio Social Acceptance Scale, Advanced Series. This approach asked each pupil to rate his classmates on a five-point scale, in which the following scale values were to be used to designate ratings: 1—Very, very best friends; 2—Good friends; 3—Not friends, but okay; 4—Don't know them; 5—Not okay. Experience has indicated that the values assigned to pupils in a class may be looked upon as points on a continuum.

3. "Casting Characters for Class Plays," a variant of the "Guess Who" test, in which each pupil in the classes surveyed was asked to select a classmate to act a given role in a class play. Twelve characters were described, and the pupil was asked to indicate "the one classmate you think is best suited for each part because he (or she) is just that way naturally." In actuality, the descriptions given could be classified as representing positive or negative traits:

"Someone who is always in good humor, who smiles or laughs a good deal; who makes others happy."

"Someone who is snobbish and conceited; who feels superior to others; who likes to order others around."

Six positive characterizations (happy, cooperative, leader, dependable, friendly, and outstanding) and six negative characterizations (shy, snobbish, poor loser, bookworm, unhappy, and "show-off") were developed to comprise the total scale.

In order to secure a measure of the personal functioning of the matched groups, the California Test of Personality, Intermediate Series, was used. This test is divided into two sections: Section I, Self Adjustment, purports to indicate how the pupil feels about himself—his self-reliance, his estimate of his own personal worth, his sense of personal freedom, and his feeling of belonging. In addition, an attempt is made to determine the pupil's freedom from withdrawing tendencies and

nervous symptoms. Section II, Social Adjustment, seeks to indicate how the pupil functions as a social being—his knowledge of social standards; his social skills; his freedom from antisocial tendencies; and his family, school, and community relations.

FINDINGS

Two groups of 95 intellectually gifted pupils, one drawn from a total group of 418 pupils enrolled in 11 "special-progress classes," and one drawn from a total group of 397 pupils enrolled in 11 "normal-progress classes," were compared by means of sociometric techniques. In the discussion which follows, the first of these groups is referred to as the "special-progress in-group," while the second is referred to as the "normal-progress in-group." The remaining pupils comprising the total group are referred to as the "special-progress out-group" and the "normal-progress out-group," respectively. Through comparing the responses of these four groups, insights can be developed concerning the adjustment of intellectually gifted pupils enrolled in special-progress classes composed of their intellectual peers as contrasted with the adjustment of similar pupils attending normal-progress classes, which enrol a large number of less gifted children.

1. *Friendship Nominations.*—One of the questions that might be raised concerning the social adjustment of intellectually gifted pupils is: "Will intellectually gifted pupils be accepted by classmates more readily when attending classes composed of

their intellectual peers than they will be in classes enrolling, for the most part, normal-progress pupils?"

The Friendship Nominations made by the pupils in both types of classes provide a partial answer to the question. Table 1 presents a summary of

ence in per cent of "best-liked" choices directed to the in-groups drawn from special-progress and normal-progress classes is not significant. However, the per cent of "least-liked" choices directed to the in-group drawn from normal-progress classes by mem-

TABLE 1

NUMBER AND PER CENT OF "BEST-LIKED" AND "LEAST-LIKED" CHOICES DIRECTED TO IN-GROUPS IN SPECIAL-PROGRESS AND IN NORMAL-PROGRESS CLASSES (FRIENDSHIP NOMINATIONS)

GROUP AND CHOICES	BEST-LIKED CHOICES				LEAST-LIKED CHOICES			
	Special-Progress Classes		Normal-Progress Classes		Special-Progress Classes		Normal-Progress Classes	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Pupils in total group.....	418	100.0	397	100.0	418	100.0	397	100.0
Pupils in in-group.....	95	22.7	95	23.9	95	22.7	95	23.9
Possible choices, total group.....	1,254	100.0	1,191	100.0	1,254	100.0	1,191	100.0
Choices directed to in-group by total group.....	274	21.9	278	23.3	213	17.0	259	21.7*
Possible choices, out-group.....	969	100.0	906	100.0	969	100.0	906	100.0
Choices directed to in-group by out-group.....	212	21.9	217	24.0	174	18.0	203	22.4†
Possible choices, in-group.....	285	100.0	285	100.0	285	100.0	285	100.0
Choices directed to in-group by in-group.....	62	21.8	61	21.4	39	13.7	56	19.7

* Significantly different from paired per cent at .01 level.

† Significantly different from paired per cent at .05 level.

the number and per cent of "best-liked" and "least-liked" choices directed to in-group pupils enrolled in special-progress and in normal-progress classes.

The per cent of choices, both as "best-liked" and "least-liked," directed to the in-groups enrolled in normal-progress classes is generally slightly higher than that of choices directed to the in-groups attending special-progress classes. Statistical analysis reveals that the small differ-

bers of the total group proves to be significantly greater than that directed to the in-group drawn from special-progress classes. This significant difference may be attributed, in large measure, to the choices made by members of the out-group. The indications are, then, that pupils who meet the intelligence-test standards for admission to special-progress classes and who remain in normal-progress classes are somewhat less acceptable to their classmates than their matched pairs

who are placed in special-progress groups. Moreover, it appears that this lower degree of acceptability is determined by the greater rejection of such potential special-progress class members on the part of their less intelligent classmates.¹

Further evidence concerning the relative acceptance of special-progress pupils grows out of a consideration of

TABLE 2

NUMBER AND PER CENT OF MUTUAL CHOICES AND REJECTIONS IN WHICH MEMBERS OF IN-GROUP IN SPECIAL-PROGRESS AND IN NORMAL-PROGRESS CLASSES PARTICIPATE

CHOICES AND GROUP	SPECIAL-PROGRESS CLASSES		NORMAL-PROGRESS CLASSES	
	Number	Per Cent	Number	Per Cent
<i>Mutual choices:</i>				
Total group.....	248	100.0	222	100.0
Out-group choosing in-group.....	86	34.7	86	38.7
In-group choosing in-group.....	8	3.2	14	6.3
<i>Mutual rejections:</i>				
Total group.....	84	100.0	75	100.0
Out-group rejecting in-group.....	28	33.3	32	42.7
In-group rejecting in-group.....	1	1.2	3	4.0

the mutual choices and rejections noted in the special-progress in-group as compared with those in evidence in the normal-progress in-group. Table 2

¹ It should be noted that this analysis is based upon the use of the usual formula for the standard error of the difference of two proportions, which is not rigorously correct in this situation since the ratings involved are not experimentally independent but are made by a common group of raters and of a common group of raters. A more appropriate statistic is not available at the present time.

presents a summary of the number and per cent of mutual choices and rejections in which members of the in-groups drawn from both types of classes participate. In addition, the table presents the number and per cent of such mutual choices and rejections in which two in-group members choose or reject each other.

The per cents of both mutual choices and rejections directed to members of the in-group drawn from normal-progress classes are greater than those observed in special-progress classes. None of the obtained differences, however, is statistically significant. Although in-group members drawn from normal-progress classes tend to select each other more frequently and tend to be rejected by, and to reject, out-group members to a greater degree than their counterparts enrolled in special-progress classes, the weight of the evidence is not conclusive.

A third approach which may be utilized in determining the relative acceptability of intellectually gifted children enrolled in special-progress and normal-progress classes makes use of the ability of the Friendship Nomination technique to delineate the formation of cliques, which are readily identified through the development of a sociogram charting pupil choices. Table 3 summarizes the data resulting from a consideration of the cliques identified in the classes studied.

At first glance, it would seem that children who meet the intelligence-test standards for admission to special-progress classes but who remain

in normal-progress classes do find it somewhat more difficult than their counterparts in special-progress classes to enter into the closely knit social framework which constitutes a clique and that, when such pupils are accepted as clique members, they manifest a greater tendency to select their

TABLE 3
NUMBER AND PER CENT OF CLIQUES
OBSERVED IN IN-GROUPS IN SPECIAL-
PROGRESS AND IN NORMAL-PROGRESS
CLASSES

	SPECIAL- PROGRESS CLASSES		NORMAL- PROGRESS CLASSES	
	Num- ber	Per Cent	Num- ber	Per Cent
Pupils in total group..	418	100.0	397	100.0
Pupils in cliques.....	179	42.8	161	40.6
Cliques.....	49	100.0	43	100.0
Cliques enrolling in- group members.....	31	63.3	28	65.1
Cliques enrolling more than one in-group member.....	10	20.4	11	25.6
In-group members.....	95	100.0	95	100.0
In-group members in cliques.....	43	45.3	39	41.1

intellectual peers as clique partners. However, differences between the special-progress and normal-progress classes are generally rather small and do not reach a statistically significant level.

2. *Ohio Social Acceptance Scale.*—The Ohio Social Acceptance Scale provides another approach to evaluation of the social adjustment of the pupils. The average rating received by each pupil may be looked upon as a quantitative expression of the pupil's status within the group of which he is a member. Table 4 presents the mean status

scores received by members of the in-group and out-group, when rated by in-group and out-group members, respectively, in both special-progress and normal-progress classes.

The mean status of in-group members rated by out-group members is slightly higher in the case of groups drawn from special-progress (2.81) rather than from normal-progress (2.86) classes. Moreover, the mean

TABLE 4
MEAN STATUS SCORES OF IN-GROUP AND
OUT-GROUP MEMBERS DRAWN FROM SPE-
CIAL-PROGRESS AND NORMAL-PROGRESS
CLASSES WHEN RATED BY IN-GROUP AND
OUT-GROUP MEMBERS

GROUP RATED	SPECIAL- PROGRESS CLASSES		NORMAL- PROGRESS CLASSES	
	Mean	Stand- ard Devia- tion	Mean	Stand- ard Devia- tion
In-group by in-group	2.91	.65	2.92	.64
In-group by out- group.....	2.81	.47	2.86	.56
Out-group by in- group.....	2.95	.59	3.00	.65
Out-group by out- group.....	2.91	.50	2.90	.53

status score of out-group members rated by in-group members enrolled in special-progress (2.95) classes is also somewhat higher than that observed in groups drawn from normal-progress (3.00) classes. However, no significant difference appears between mean status scores of in-group and out-group members in special-progress and in normal-progress classes, when such status scores are the result of ratings by out-group and in-group members, respectively. Thus, although the ob-

tained scores point to a slightly higher degree of mutual acceptability of in-group and out-group members in special-progress classes, no definitive difference can be established between groups drawn from special-progress and from normal-progress classes.

3. "*Casting Characters.*"—The use of the "Casting Characters for Class Plays" technique provides a third ap-

proach to the assessment of social adjustment. It will be remembered that the scale designates six positive and six negative roles for which each pupil is to select a classmate. Table 5 presents a summary of the number and per cent of choices for positive and negative roles directed to in-group pupils enrolled in both types of classes.

When choices to portray negative roles are considered, minor differences appear in the per cent of choices directed to members of the in-groups by the total group of special-progress or of normal-progress pupils. However, the per cent of choices to play negative roles which is directed to in-group members by out-group members is slightly smaller in the normal-progress

TABLE 5

NUMBER AND PER CENT OF CHOICES FOR POSITIVE AND NEGATIVE ROLES DIRECTED TO IN-GROUPS IN SPECIAL-PROGRESS AND NORMAL-PROGRESS CLASSES

CHOICES	POSITIVE ROLES				NEGATIVE ROLES			
	Special-Progress Classes		Normal-Progress Classes		Special-Progress Classes		Normal-Progress Classes	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Made by total group.....	2,229	100.0	2,268	100.0	2,155	100.0	2,196	100.0
Directed to in-group.....	529	23.7	599	26.4*	488	22.6	457	20.8
Made by out-group.....	1,658	100.0	1,734	100.0	1,613	100.0	1,683	100.0
Directed to in-group.....	401	24.2	465	26.8	360	22.3	362	21.5
Made by in-group.....	571	100.0	534	100.0	542	100.0	513	100.0
Directed to in-group.....	128	22.4	134	25.1	88	16.2	95	18.5

* Significantly different from paired per cent at .05 level.

proach to the assessment of social adjustment. It will be remembered that the scale designates six positive and six negative roles for which each pupil is to select a classmate. Table 5 presents a summary of the number and per cent of choices for positive and negative roles directed to in-group pupils enrolled in both types of classes.

The per cent of positive choices directed to members of the in-group by the total group of which it is a part is smaller in the group of pupils enrolled

in special-progress classes than it is in the group drawn from normal-progress classes. Moreover, the per cent of choices to play positive roles which is directed to special-progress in-group members by both in-group and out-group members is smaller than that directed to in-group members enrolled in normal-progress classes. When choices to play positive roles are used as a cri-

terion, the more favorable picture is noted in normal-progress rather than in special-progress classes.

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rather than in the special-progress classes, while the per cent of such choices directed to in-group members is greater in the group of pupils drawn from normal-progress rather than from special-progress classes. Therefore, when choices to play negative roles are used as a criterion, the group of normal-progress pupils is again placed in the more favorable light.

In order to test the generalizations advanced, the observed differences between special-progress groups and normal-progress groups were examined for statistical significance. Only one of the observed differences proved to be significant. Thus, the per cent of choices to play positive roles directed to in-group members drawn from normal-progress classes by the total group of which it is a part is significantly greater than that directed to in-group members attending special-progress classes. In some measure, this difference may be looked upon as the outgrowth of differences in choices directed to in-group members on the part of their respective out-groups. No significant differences appear when choices to play negative roles are considered. The results of this analysis may be offered as partial confirmation of the generalization advanced above: when the "Casting Characters" approach is used as a criterion, intellectually gifted children attending normal-progress classes tend to show better social adjustment than their counterparts enrolled in special-progress classes.

In order to cast further light upon

the differences between the two groups, the number and per cent of choices for *each* positive and negative role directed to in-group members enrolled in special-progress and in normal-progress classes was determined. The differences between groups were found to be rather small. Only four of the obtained differences between groups (all found for negative roles) proved to reach a statistically significant level. Although the per cent of total choices to play positive roles directed to normal-progress in-group members by the total group of which it is a part was significantly greater than the per cent directed to special-progress in-group members, this difference cannot be attributed to a consistent tendency to select in-group members to play a given role in one type of class as opposed to another.

The total choices for negative roles failed to give rise to significant differences between groups. Two significant differences appeared when individual roles were considered. Thus, in comparison to choices of pupils in normal-progress groups, a significantly larger per cent of the choices of total groups attending special-progress classes (4.17) in comparison with choices of pupils in normal-progress classes (2.68) characterize in-group members as "shy." A significantly larger per cent of the choices of the total groups attending normal-progress classes (4.78) designate in-group members as "bookworms" as compared with the corresponding per cent of special-progress classes (3.15). In

both instances, the significant differences could be attributed to the choices made by the respective out-groups.

4. *The California Test of Personality.*—For the most part, there was little difference in the functioning of the two groups as revealed by an analysis of the results obtained by seventy-nine matched special-progress and normal-progress pupils on the California Test of Personality. In only one subsection of the test did a significant difference appear. The mean score of pupils enrolled in normal-progress classes (12.95) proved to be significantly higher than that of their counterparts enrolled in special-progress classes (12.29) on the section of the test purporting to measure adjustment in community relations. Since this subsection of the test contains only fifteen items and the obtained difference is less than one raw-score unit, the psychological significance of the obtained difference may well be questioned. It is quite evident that similarities in functioning of pupils on the test in question far outweigh such minor differences as do appear and that, for all practical purposes, the personal adjustment of the two groups of pupils may be considered equivalent.

It was felt that an examination of the individual items of the test should be undertaken in order to determine whether additional insights concerning the functioning of the two groups might be developed. The per cent of each group of pupils giving a "favor-

able" (well-adjusted) response to each item of the test was determined. In general, differences in the per cents of pupils in each group responding favorably to the separate items were relatively small. Actually, the differences reached a statistically significant level in only 17 of the 180 items comprising the total test. In four instances, items to which a significantly larger per cent of normal-progress pupils responded favorably deal with community relations. Three additional discriminating items, all of which tended to favor the normal-progress group, centered in the sense of personal freedom which the pupils have developed.

Another approach to the assessment of the personal adjustment of the pupils made use of sociometric instruments in conjunction with the California Test of Personality. Previous experience with the measures has indicated that low scores on the latter test, combined with rejection as a friend by other classmates and with the nomination to serve as one or more of the less desirable characters in the class play is diagnostic of maladjustment.² In order to identify the specific pupils who might be considered maladjusted, the following criteria were applied:

1. A score on the California Test of Personality below the fiftieth percentile.

² J. Wayne Wrightstone, "Assessing Pupil Adjustment by Self-descriptive and Sociometric Techniques," *Growing Points in Educational Research*, pp. 330-35. Official Report of the American Educational Research Association, 1949. Washington 6: American Educational Research Association, 1949.

2. Rejection by more than three classmates on the Friendship Nomination technique.
3. An average score of 3.50 or higher on the Ohio Social Acceptance Scale.
4. Being chosen as an undesirable character in "Casting Characters for Class Plays" in two or more instances.

Table 6 presents a summary of the number and per cent of pupils in the special-progress and normal-progress groups who would be considered maladjusted if the first criterion were applied singly and if it were applied in combination with the other three criteria. When any one of the comparisons is considered, differences between the two groups are relatively small. Upon analysis, it is evident that the minor differences between the two groups may be attributed to chance factors. If the approach utilized may be looked upon as an adequate measure of personal adjustment, it is safe to say that the two groups show approximately equivalent functioning.

DISCUSSION OF RESULTS

The results obtained through the use of the sociometric instruments prove to be inconclusive of differences in functioning and adjustment of pupils in special-progress and in normal-progress groups. In only a few instances do the obtained differences between the contrasted groups reach a statistically significant level. Thus, intellectually gifted children attending normal-progress classes are chosen as "least-liked" to a significantly greater extent than their matched pairs

enrolled in special-progress groups. Moreover, this lower degree of acceptability is determined by the greater rejection of such potential special-progress class members on the part of their less intelligent classmates. On the other hand, the per cent of choices to play positive roles depicted in the "Casting Characters" instrument which are directed to intellectually

TABLE 6

NUMBER AND PER CENT OF MALADJUSTED PUPILS AMONG SEVENTY-NINE MATCHED PAIRS IN SPECIAL-PROGRESS AND NORMAL-PROGRESS CLASSES

CRITERION	SPECIAL-PROGRESS CLASSES		NORMAL-PROGRESS CLASSES	
	Num-ber	Per Cent	Num-ber	Per Cent
California Test of Personality.....	22	27.8	19	24.1
California Test plus:				
Friendship Nominations.....	4	5.1	6	7.6
Ohio Social Acceptance Scale.....	8	10.1	8	10.1
Casting Characters for Class Play....	6	7.6	2	2.5
Two other criteria..	4	5.1	5	6.3

gifted children enrolled in normal-progress classes by the total normal-progress group is significantly greater than that directed to matched pairs drawn from special-progress groups.

In spite of this difference, however, there appears to be no consistent tendency to select intellectually gifted children to play a given positive role in normal-progress classes. Rather, the term "bookworm" is applied to such children by their less able classmates

to a greater degree than it is to a group of matched pupils enrolled in special-progress classes by their intellectual peers. Apparently, then, the lower degree of acceptability characteristic of the group of intellectually gifted pupils enrolled in normal-progress classes may be attributed, in some measure, to their greater preoccupation with what their less intelligent classmates feel are bookish pursuits.

This finding leads a person to wonder what the role of the teacher of such heterogeneous groups has been. Has he tended, through his organization of learning activities in the classroom, to emphasize just those aspects of the gifted child's equipment which will cause him to lose face among his classmates? Has he stressed individual achievement to such a degree that he

has lost sight of the importance of developing a sound group feeling?

One must be careful, however, not to belabor these differences between the two groups unduly. It must be emphasized that similarity in functioning on the part of the two groups of pupils is far more characteristic than difference. In general, there appears to be little difference in the personal and social adjustment of matched groups of intellectually gifted pupils drawn from special-progress and from normal-progress classes. The indications are, then, that failure to place gifted pupils in homogeneously organized groups will not be reflected in less adequate personal and social adjustment, nor will such placement be associated with greater personal and social adequacy.

JUNIOR HIGH SCHOOL REORGANIZATION AFTER A HALF-CENTURY

II. PURPOSES OF, AND GRADE-GROUPING FOR, REORGANIZATION

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A PREVIOUS ARTICLE considered the growth and status of the junior high school reorganization movement over the last fifty years.¹ The present article goes on to describe the purposes of reorganization and considers grade-grouping as a feature of this reorganization.

OBSOLESCENT AND ABIDING PURPOSES

A movement of the magnitude manifested in the rapid growth and predominant status of junior high school reorganization could not have flourished without the intense pressure of many and diverse educational needs not being met in the upper elementary-school and lower high-school grades as conventionally organized. As reorganization to meet the needs proceeded, the needs were reflected in claims made on behalf of the reorganized schools. The claims, in turn, were readily transmutable, through validation by speculation, or by objective inquiry, or by both, into what

were often referred to as the special purposes, or "peculiar functions," of the junior high school. Examination of the early literature discloses a welter of these presumed-to-be distinctive purposes of the new unit in school organization.

Among the potent factors conditioning or modifying purposes at any school level must be social and economic trends. Certain of these trends during the half-century since the inception of the idea of the junior high school have been such as to discredit some of the early claims and purposes. Instances in point may be cited.

The period of first advocacy of junior high school reorganization was one during which there was large-scale elimination from school, notably heaviest in the particular grades included in the junior high school. It was only natural that one of the purposes claimed for reorganization would be "better retention" in school. Everyone is aware of the forces and trends that have, in the meantime, made for a longer period of school attendance. It is likely that the junior high school has helped to lengthen the period of

¹ Part I of this article describing "Growth and Status of Reorganization," appeared in the October, 1953, issue of the *School Review*.

schooling, but we may be sure that social trends outside the school have been more influential than the school itself.

Again, a purpose of early advocacy for the junior high school was vocational education. The advocacy stemmed from an awareness of the fact that children dropped out of school during these school years and sought employment without having been prepared for it. Technological trends, with the accompanying lengthening of the period of compulsory schooling, have in the meantime excluded youth of these ages from employment and raised above junior high school years the level at which vocational education is appropriate.

Thinking along these lines has persuaded certain writers in recent years to contend that the junior high school is without distinctive purposes. Thus, says one educationist, after citing instances of disappearing functions akin to those mentioned in the preceding paragraphs: "We are forced to conclude that, by and large, the junior high school is merely a convenient administrative unit which has few, if any, distinctive functions and little psychological justification."² Significantly, the same writer goes on to say that, "even though the junior high school as a distinctive unit has not fully demonstrated its worth, the *problem of developing a satisfactory curriculum for the early adolescent still remains*."³

In a somewhat similar vein, another writer, himself in charge of a junior high school in a large city school

system, asserts: "Most of the functions formulated during the campaign years when the junior high school was the subject of disputation have been outmoded in one way or another."⁴ At the same time, while discrediting "peculiar functions" of the junior high school, the same writer speaks of "obligations" of the unit, "which are generally recognized today," among which he mentions "guidance," "exploration," "adaptation to individual differences," and "subject-matter integration." These "obligations" differ hardly at all from purposes advocated for the junior high school over practically its full period of existence.

TWO INQUIRIES INTO PURPOSES

While assertions by individuals as to what should or should not be regarded as purposes of junior high school education are frequently encountered in recent and current literature, few studies to establish or disestablish them have been made and reported. Outcomes of two studies will be mentioned here.

One was made by Howell,⁵ who submitted to "more than a hundred selected junior high school administrators" a list of forty-five "original

² Harold Albery, "Reorganizing the Junior High School Curriculum," *Bulletin of the Department of Secondary-School Principals*, XXIX, (April, 1945), 18.

³ *Loc. cit.* Italics not in the original.

⁴ M. E. Herriott, "The Junior High Schools of California," *California Journal of Secondary Education*, XVI (December, 1941), 460-64.

⁵ Clarence E. Howell, "Junior High: How Valid Are Its Original Aims?" *Clearing House*, XXIII (October, 1948), 75-78.

aims" of the junior high school, which had been compiled from a "voluminous study of junior high school texts and articles dealing with the subject from the time the junior high school was conceived." The respondents had been asked to indicate which of the aims were "(1) As valid as ever," "(2) Less valid than before," "(3) [of] No special value," and "(4) No longer valid." In presenting the outcomes of his inquiry in tabular form, the author says, "... we may well conclude that the original aims and purposes . . . are still valid and acceptable with only a modicum of change." This opinion of persistence may be illustrated by pointing out that the aims indicated by 90 per cent or more of the respondents as being "as valid as ever" were:

- To provide a suitable environment for children 12-16 years of age.
- Exploring interests, abilities, and aptitudes of those ages.
- Adapting training and education to individual interests and needs.
- To help the individual find himself.
- Caring for individual differences in the various subjects.
- Special care for retarded pupils.
- Participation of pupils in school governmental activities.
- Physical diagnosis and remedial work for individuals.

It may be too obvious to mention that within these illustrations are comprehended the time-honored functions of recognition of the nature of the child at adolescence, guidance, exploration, and provision for individual differences.

The second study cited here is one reported by Gruhn and Douglass⁶ in

their book on the junior high school. This study involved submission of a tentative formulation of six functions to "a selected group of specialists in the theory and philosophy of the junior high school." The respondents were asked to indicate whether, in their opinions, each tentative item is a "major function," a "minor function," or "not a function." Three of these items, namely "exploration," "guidance," and "differentiation," received the approval, in at least one important aspect, of all respondents. Most other items, namely, "integration," "socialization," and "articulation," approached unanimous approval. The list submitted to the specialists included no reference to the junior high school as serving the needs of early adolescents, although the authors admit that "no one today would quarrel with that as a purpose of the junior high school." They think that the "concept is so broad and all-inclusive that it has little value as a statement of function."⁷

Any review of literature dealing with junior high school reorganization inevitably reveals that the purpose of serving the needs of youth during early adolescence has been prominent from the beginning a half-century or so ago. One person who early directed attention to these needs was G. Stanley Hall, whose two-volume work *Adolescence* was published in 1904. Investigative procedures used by

⁶ William T. Gruhn and Harl R. Douglass, *The Modern Junior High School*, chap. iii. New York: Ronald Press Co., 1947.

⁷ *Ibid.*, p. 56.

Hall, and, in consequence, some of his conclusions concerning the nature and changes at adolescence, were subsequently questioned, and some critics went so far as to deny changes of sufficient moment to justify important modifications of the educational program to meet the needs of youth. However, investigation of the physical, social and emotional, and intellectual nature of youth, together with the needs represented, has been continued and enlarged over the years and has increasingly underwritten the need for an educational program taking cognizance of this nature.

Careful examination of the educational implications for early adolescence in any of the better recent treatises on the psychology of adolescence should bring conviction on this score. One of the most revealing recent compilations in this connection is to be found in *Guides to Curriculum Building: The Junior High School Level*,⁸ which was prepared by the Wisconsin Cooperative Educational Planning Program. This compilation includes a systematic portrayal of the known physical, social and emotional, and intellectual characteristics of children of junior high school age; the pupil needs indicated by these characteristics; and "what the school can do" to meet the needs. Scrutiny of the portrayal can hardly fail to convince that a major and special responsibility of the school

at this level is the recognition of the nature of the child at adolescence and that adequate recognition is impossible without large-scale modification of the programs and regimens characteristic of later grades of the eight-year elementary school and first years of the four-year high school.

The compilation just mentioned convinces the reader not only of the all-pervasive purpose of recognizing early adolescent nature but also of the relevancy of the other purposes recurrently assigned to junior high school reorganization. The testimony concerning individual differences⁹ leaves no room for denying that differentiation on an increasing scale is essential at this level. The need for exploration is made explicit in the indication of "social experience in groups" as an important part of the program, the "amazing intellectual curiosity" in this age group, the "increased interest on the part of boys and girls in . . . vocational plans,"¹⁰ and elsewhere. The need for guidance in other than exploratory aspects is explicit at many other points in the compilation. In a sense, these additional purposes are corollary to the all-pervasive function, or they may be regarded as important phases of it. The need for performing these and other corollary functions is reinforced by many of the "social pressures influencing junior high school youth" which are identified in another section of the compilation.¹¹

⁸ Reprinted with permission by the Illinois Secondary School Curriculum Program, Bulletin No. 8, Circular Series A, No. 51. Springfield, Illinois: Vernon L. Nickell, Superintendent of Public Instruction, 1950.

⁹ *Ibid.*, p. 61 and elsewhere.

¹⁰ *Ibid.*, pp. 48, 60, 67.

¹¹ *Ibid.*, chap. iii.

THE SENSE OF DISTINCTIVENESS

An issue has sometimes been raised concerning the "peculiarity," or distinctiveness, during the early years of the movement often claimed for these functions ascribed to junior high school reorganization. They were often designated as "peculiar functions" as if they applied (1) only to this particular span of grades and (2) even to these grades in reorganized schools in contrast with corresponding grades in schools in the traditional (8-4) organization. Clearly, the only purpose, whatever may have formerly been claimed, peculiar to the *level* is that pertaining to the nature of the child early during adolescence. The others, like guidance and provision for individual differences, are hardly less applicable to school levels above and below. This is not to say that the junior high school has not rendered an inestimable service to all levels of education by being the leaven by means of which these other functions have become popularized and thus encouraged in application to other school levels.

The question of whether or not the all-pervasive purpose of recognizing the nature of youth during early adolescence is peculiar to reorganized as compared with unreorganized schools must have its answer in what schools of these two main patterns of organization can and do accomplish. Implications of some of the evidence in subsequent sections of this article are that, unfortunately, the unreorganized schools cannot hope to compete with reorganized schools in serving

either the all-pervasive purpose or the corollary purposes.

GRADE-GROUPING FOR REORGANIZATION

Review of the purposes of reorganization is logically followed by consideration of what have usually been referred to as its "features." These are nothing more than the arrangements introduced for achieving the functions of the reorganized school, such as the program of studies (or curriculum organization); departmentalization or other plan of instructional assignment; the program of provisions for individual differences; the advisory, or guidance, program; and the social, or extra-class, organization and activities. With these features is sometimes included also the grade-grouping in reorganization, since different grade-groupings may achieve the functions in varying degrees. Whether or not the pattern of grades in reorganization is included among the features, it has always seemed desirable to accord it prior or early consideration.

Because certain facts bearing on grade-grouping in reorganization have already been presented, it remains largely to summarize any novel proposals in the recent literature and to abstract findings of certain of the inquiries indicative of preference for some patterns of organization as compared with others.

Examination of recent educational literature discloses only a few proposals for grade-groupings for reorganization differing notably from the patterns recurrent in the picture of

growth and status as reported in the first article in this series. A few articles describe or advocate a 7-5 pattern, that is, an elementary school of seven grades followed by a five-year high school. A number of systems, just how many is not known, have moved to this pattern, a minority of them from the 6-3-3 pattern with separate junior and senior high schools. The remainder are mainly in certain states of the South, formerly on the 7-4 plan, that have added, in various ways, a year to the four-year high school.

One writer, following experience in a five-year school and after having listed some of the frequently mentioned objections to the six-year school, stated that "90 per cent of the valid objections to the combined [junior-senior high] school are removed when the seventh grade is not included."¹² The objections mentioned were clustered around the association of immature with somewhat more mature youth. Another writer, discussing the problem of organization for the state of Washington, mentions a "feeling among many administrators" favorable to an elementary school of seven grades and a consideration, in schools too small to extend the program beyond Grade XII, of the 7-5 plan.¹³ Neither of these writers takes cognizance of the time of onset of puberty and other facts concerning

early adolescence that lend support to the practice of including Grade VII in the reorganized secondary school.

A pattern of organization frequently advocated in recent literature is the 6-4-4 plan, applicable in systems being extended to include the two junior-college years. A digest of evidence giving grounds for preference for the lower four-year secondary school unit as compared with the three-year junior high school is presented below.

The junior high school movement was well under way before efforts at comparative appraisal of reorganized and unreorganized schools were made and reported. The typical finding of such studies may be illustrated by what was perhaps the main conclusion from one made by Beatley.¹⁴ From the administration of achievement tests in the conventional school subjects to pupils in Grades VII, VIII, and IX in reorganized and unreorganized systems in New England, Beatley found that the gains made during the school year did not differ markedly. Greater gains by one group in some subjects were offset by greater gains by the other group in other subjects, from which one might conclude that the gains in reorganized and unreorganized schools were roughly equal. However, analysis of the schedules of the schools made it clear that this equivalence was attained in the reorganized schools by devoting less time to

¹² L. P. Farris, "Compensating Values of a Five-Year School," *California Journal of Secondary Education*, XVI (December, 1941), 470-72.

¹³ Thomas R. Cole, "What Grades Should Constitute the Junior High School?" *American School Board Journal*, CXII (February, 1946), 42.

¹⁴ Bancroft Beatley, *Achievement in the Junior High School*. Harvard Studies in Education, Vol. XVIII. Cambridge, Massachusetts: Harvard University Press, 1932.

the conventional subjects and devoting the remaining time to subjects other than those represented in the tests, such as the social studies, science, fine and practical arts, and the like. Besides, the reorganized schools gave more time to extra-class activities. Thus, the major conclusion is that the pupil in the reorganized school did no less well in the tool subjects at the same time that he was experiencing the greater enrichment afforded by a broader program.

While such investigations demonstrated the superiority of junior high school reorganization, they did not answer the question of which pattern of grade-grouping is preferable. In this connection it is unfortunate that the findings of the reorganization project of the National Survey of Secondary Education were not more extensively publicized. This project undertook to throw light not only on the question of whether reorganized schools are better than unreorganized schools but also on which of the then current patterns of reorganization were preferable. The procedure devised by Spaulding and Frederick and followed in that extensive investigation involved the identification of nine "features" of organization in large numbers of schools of the different patterns of organization. Measures of "comprehensiveness" and of "consistency" of organization were obtained for individual schools and for the groups of schools. The assumption in the procedure was that schools with the most comprehensive and con-

sistent setup of features can best render service to youth.

The groups of schools represented in Spaulding and Frederick's comparison were the separate 3-year junior high schools, 3-year senior high schools, junior-senior high schools on a 3-3 basis, undivided 6-year schools, 2-year junior high schools with 4-year senior high schools, and the two highest elementary grades (VII-VIII) and the 4-year high schools in systems on the 8-4 plan. The following paragraph summarizes the investigators' conclusions:

When schools of the various common types are rated in terms of the comprehensiveness and consistency of their internal organizations, the undivided 6-year schools and the junior-senior high schools organized on a 6-3-3 basis stand out above all the other types. The separate 3-year junior and senior high schools seem to owe whatever advantage they obtain largely, though not entirely, to the size of their enrolments. Unreorganized schools prove superior in comprehensiveness of organization to the 2-year and 4-year reorganized schools; they are unsuccessful, however, in achieving a consistency of organization comparable to that of the reorganized schools.¹⁵

The writer recalls that, when this conclusion of the superiority in organization of the 3-3 and 6-year undivided schools over the separate junior and senior schools was first reported, there was considerable remonstrance and resistance to it, particu-

¹⁵ Francis T. Spaulding, O. I. Frederick, and Leonard V. Koos, *The Reorganization of Secondary Education*, p. 119. National Survey of Secondary Education, Monograph No. 5. United States Office of Education Bulletin 1932, No. 17.

larly on the part of heads of the separate schools. Among others who questioned it were persons who had seen certain undivided 6-year schools in operation and had noted the meager provision of features sometimes accorded Grades VII and VIII in such schools. The present writer can attest to this observation from firsthand contact in some schools. It must be inferred that this was not the typical condition in the junior-senior and undivided schools represented in the National Survey inquiry.

Because the 6-4-4 plan of organization is one of relatively recent advent, appraisal had to wait until such a time as a considerable number of school systems were committed to it and operating on it. The present writer undertook such a comparison and reported the findings about ten years ago.¹⁶ The comparison involved the gathering of facts concerning certain features of internal organization in seventeen four-year and thirty-four three-year junior high schools. The investigation included visits to most of the four-year schools represented.

The main conclusion drawn from the comparison is that the four-year junior high school is a better unit than is the three-year school, which, in turn, holds an established superiority over corresponding grades of the older 8-4 pattern. The facts of practice disclosed a curriculum of greater enrichment and expanded possibilities in

exploration in the four-year schools. They showed a development in the extra-curriculum of organizations and activities that capitalize the greater maturity of the pupils in Grade X, thereby affording more experience in leadership of, and participation in, affairs of social significance that comport with needs in a democratic society. They found a schedule more in keeping with preferred theory and practice. They showed a trend toward a better-prepared teaching staff, more nearly balanced in representation of men and women, and a more nearly adequate administrative staff. They indicated improvement of the housing and facilities to accommodate the enriched program of instruction and activities. These elements of superiority had already emerged during the young lives of these new units before many teachers and administrators had become fully aware of possibilities.

In light of the facts on the growth and status of junior high school reorganization as reported in the first paper in this series and of the inferences from the projects in appraisal of grade-groupings just reviewed, it is appropriate to quote a few concluding sentences from Jones's appraisal of the whole movement. Said he:

The tendency . . . seems to be for a longer unit in the secondary school; either a six-year unit or two four-year units. . . . The separate junior high school is not adapted to the small high school and most of our high schools have an enrolment of 125 or less. Those considerations lead to the conclusion that in all probability the junior

¹⁶ Leonard V. Koos, "The Superiority of the Four-Year Junior High School," *School Review*, LI (September, 1943), 397-407.

high school, while its contribution to educational reform has been great, will gradually pass from the picture as a separate school.¹⁷

A comment on this conclusion concerning the likelihood of the passing of the separate three-year junior unit is that it is, in part, merely an academic question even in systems preferring and working out, as the prevailing type, six-year secondary schools. This is because in systems of large school population, owing to the undesirability of having children of early adolescence travel long distances

to attend school and the desirability of school units of moderate size for youth of junior high school age, more schools for them will be needed than for youth at the senior high school level. Such factors will foster the continuance of separate three-year units, especially in systems that are not extended upward to include Grades XIII-XIV.

The concluding article in this series will deal with "Organization of the Curriculum," "Retreat from Departmentalization," "Other Features of Reorganization," and "Prospects of Further Reorganization."

[To be concluded]

¹⁷ Arthur J. Jones, "The Junior High School: Past, Present, and Future," *Bulletin of the National Association of Secondary-School Principals*, XXVIII (March, 1944), 14.

A SEMANTICS CLUB IN A JUNIOR HIGH SCHOOL

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WORD-STUDY is thought monotonous and meaningless by many teachers, and consequently it is noteworthy to find that, when it is presented in an interesting fashion, pupils will form a club to study semantics.

In 1952 the seventh-grade pupils of the Grasmere School in Fairfield, Connecticut, were introduced to semantics as an outgrowth of their science class. Because of the interest shown by the pupils and by their parents, a Semantics Club was formed in the following year in Grades VII and VIII.

MEANINGS OF WORDS

To help introduce semantics to the seventh-graders, they were reintroduced to the dictionary, with the explanation that the compilers of the dictionary are not law-givers but that they have merely recorded, to the best of their ability, what various words have meant to authors and learned persons. To help get this idea across, the change in the definition of the word *broadcast* was used. It was pointed out that, not too long ago, *broadcast* meant "to scatter seed" but that now the most common meaning of the word is "to speak messages over the radio." It was explained that we

cannot even guess what meaning any words will take in the future.

One day in class a boy was overheard calling a classmate a *coward*. A member of the class challenged the boy to say exactly what he meant by *coward*. Several members of the class went to the dictionary (the *Winston Simplified Dictionary*) and found the definition of *coward* to be "a person lacking in courage; a shamefully timid person." One pupil said he knew a boy who enjoyed playing football but who was afraid to box. Many examples were brought forth to prove that a boy or girl may be frightened or timid in one situation and not in another.

The word *strong* was discussed, and again the pupils felt there were many different meanings for the word. They came to the conclusion that it is necessary to see or hear a word in context to know what it means.

DISTORTION OF FACT BY WORD OF MOUTH

The article "Gossip Can Be Dynamite"¹ was used with the class. The child in the front seat of the first row

¹ Howard Whitman, "Gossip Can Be Dynamite," *This Week Magazine* (September 17, 1949). New York: This Week Magazine, 1949.

was given forty seconds to memorize a picture. Then he tried to repeat what he saw to the person behind him. This went on down the row. When the child in the last seat of each row had been told the gossip, he was asked to repeat what he had heard. Of course, the remarks were humorous, and the pupils seemed to be impressed with the unreliability of second-hand information.

PERSPECTIVE

Perspective was brought out by the instructor, who set up a hypothetical accident with three members of the class supposedly at the scene. The three pupils readily agreed that their stories would differ according to what each thought he had seen. They spoke of the three angles from which they would be seeing the accident. From this came discussion of judging prize fights or umpiring baseball games. The class members felt that in the future they would not be too harsh on umpires.

ADVERTISING

Many advertising slogans that were brought in by the children were discussed in class. Although the pupils said they understood the importance of advertising in our modern society, they felt that many advertisers were not giving information but were trying to create automatic reactions in as many persons as possible. They further decided that advertisers sometimes use fallacious logic. The class felt that some business firms try to produce fantasies and delusions be-

cause they believe fantasies and delusions will lead us to buy their products.

POLITICS

The Semantics Club in 1952-53 was made up largely of pupils who had been exposed to semantics in the previous year. In September the student body elected a student council. The candidates held an election campaign, and posters and slogans were displayed about the building. The Semantics Club discussed many of these slogans from a semantic point of view.

The group felt that words were necessary to get votes but that the words used in campaign slogans and campaign promises should be carefully analyzed. It was felt that politicians are sometimes compelled to make promises that later circumstances may prevent them from keeping. It was also pointed out that, when a candidate promises to help a group, such as the farmers, farmers may vote for him and then discover that he helps dairy farmers and not truck farmers. The truck farmers are disappointed, but it cannot be said that the candidate did not "help the farmers." The group felt that the politician is not always to blame but that the voter may be blamed for having an illusion to start with.

INFERENCES, JUDGMENTS, AND REPORTS

The word *inference* was brought up during a club period, and after some research the members felt that inferences were highly important. They

began to realize that in everyday life and in science we rely as much on inferences as on reports. It was felt that we may infer from the handsomeness of a man's clothes his wealth or social position in life. We may infer from the condition of a man's hands the type of work that he does. Inferences may be carefully or carelessly made. They may be made on a basis of a background of many previous experiences or no experience at all. A mechanic may be able, by listening, to tell much about the internal condition of a motor, while a novice may be entirely wrong. The group decided that inferences are statements about matters which are not directly known, made on the basis of what has been observed. The point was made that we should avoid inferences when we are reporting; that is, we should make no guesses as to what is going on in the minds of other persons. The group stressed the importance of understanding that, even if the inference appears to be fairly certain, we should remember, for the purposes of training ourselves, that it is an inference.

As an exercise using inference, the group was asked to reword the following sentence, "He thought a lot of himself, and he was frightened by girls." They substituted, "He seldom spoke to subordinates in the office. I saw him at a dance, and he only danced when a girl asked him."

The club also discussed with great interest "judgments" and "reports." They felt that a report should not state, "Jack's dad has a wonderful

car," but must rather state something like, "Jack's dad drove his car 65,000 miles without major repairs." The club members felt that too many persons believe that statements such as the following are statements of "fact": "Billy lied to me." "Johnny is a thief." "Clarence is brilliant." As ordinarily used, the word *lied* involves, first, an inference (that the person who is "lying" knew otherwise and purposely misstated the facts) and, second, a judgment (the speaker does not approve of what he has inferred Billy has done).

The group seemed to enjoy discussing the differences between judgments and reports more than any other phase of semantics. They now feel that they have a little better insight into the use of words and the effect of words upon people.

CONCLUSION

As a result of their study of semantics and participation in the Semantics Club, seventh- and eighth-grade pupils in the Grasmere School seem to be a little more aware of how things, facts, and operations are related in nature and of the differences among statements of fact, inferences, reports, and judgments. They are also more likely to examine closely extravagant promises and claims made by political candidates and advertisers, to reserve their judgment on gossip and "eyewitness" accounts, and to determine whether other persons are giving to words the same implications that they themselves give to the words in various situations.

SELECTED REFERENCES ON STATISTICS, THE THEORY OF TEST CONSTRUCTION, AND FACTOR ANALYSIS

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THE BIBLIOGRAPHY which is presented below has been selected from issues of educational and psychological journals from March, 1952, to June, 1953, inclusive. Sharp distinctions do not exist between the fields covered in this list, but, as an assistance to the student with special interests in one or more of the fields, the references have been classified under the following categories: theory and use of statistical methods, problems of test construction, and factor analysis. No articles dealing primarily with the use of tests have been included because these items are distributed functionally in other lists in the cycle, such as those dealing with secondary-school instruction and guidance.

THEORY AND USE OF STATISTICAL METHODS

729. ANGOFF, WILLIAM H. "Test Reliability and Effective Test Length," *Psychometrika*, XVIII (March, 1953), 1-14.
Develops measures of "effective test length" for speeded and power tests. These measures are used, together with certain other information, to determine the test reliability.
730. APPEL, VALENTINE. "Companion Nomographs for Testing the Signifi-
- cance of the Difference between Uncorrelated Percentages," *Psychometrika*, XVII (September, 1952), 325-30.
Presents a set of two nomographs for testing significance between uncorrelated percents and for determining necessary sizes of sample when planning studies which will involve the comparison of per cents.
731. ARBONS, A. G., and SICHEL, H. S. "On the Economies of a Pre-screening Technique for Aptitude Test Batteries," *Psychometrika*, XVII (September, 1952), 331-46.
A psychometric pre-screening technique which will reduce the cost of test administration is developed. The technique is illustrated with a numerical example.
732. ARCHER, E. JAMES. "Some Greco-Latin Analysis of Variance Designs for Learning Studies," *Psychological Bulletin*, XLIX (September, 1952), 521-37.
"Two basic multiple-classification analyses of variance of repeated measurements incorporating Greco-Latin squares" are described in detail and illustrated with hypothetical data. The applicability and limitations of the methods are described.
733. AYERS, J. DOUGLAS, and STANLEY, J. PERHAM. "The Rolling Totals Method of Computing Sums, Sums of Squares, and Sums of Cross-Products," *Psychometrika*, XVII (September, 1952), 305-10.
A detailed description of a punched-card procedure for obtaining the necessary sums

for computing correlation coefficients. Only a sorter and a tabulator equipped with a Card Cycle Total Transfer Device are used.

734. BROŽEK, JOSEF, and TIEDE, KENNETH. "Reliable and Questionable Significance in a Series of Statistical Tests," *Psychological Bulletin*, XLIX (July, 1952), 339-41.

A solution is given for determining the probability of obtaining by chance n significant critical ratios in a series of N tests of significance, the constituent events being independent.

735. BURKE, C. J. "Additive Scales and Statistics," *Psychological Review*, LX (January, 1953), 73-75.

Discussion of the applicability of statistical concepts to psychological measurements.

736. BURKE, PAUL J. "IBM Computation of Sums of Products for Positive and Negative Numbers," *Psychometrika*, XVII (June, 1952), 231-33.

Gives instructions for wiring the plug-board of the IBM tabulator in such a way that sums, sums of squares, and sums of products of positive and negative numbers can be computed without resorting to special coding in order to eliminate the negative numbers.

737. CAFFREY, JOHN, and WHEELER, FRED. "A Simplified X^2 Formula for Rapid Computation of Certain Item-Analysis Data with IBM Punched-Card Equipment," *Journal of Experimental Education*, XXI (March, 1953), 265-69.

The chi-squared formula is rewritten in order to facilitate its computation with IBM equipment. Detailed machine procedures are given.

738. COFFMAN, WILLIAM E. "Estimating the Internal Consistency of a Test When Items are Scored 2, 1, or 0," *Educational and Psychological Measurement*, XII (Autumn, 1952), 392-93.

Indicates an analysis of variance procedure for estimating the degree of internal con-

sistency of a test whose items are scored 2, 1, or 0.

739. CURETON, EDWARD E. "Note on the Scaling of Ratings or Rankings When the Numbers per Subject Are Unequal," *Psychometrika*, XVII (December, 1952), 397-99.

"The average rating (or normalized rank) of a person rated by a larger number of judges will in general be closer to the group average than will the average rating of a person rated by a smaller number of judges. . . . This note presents a technique for correcting that bias."

740. DUDEK, FRANK J. "A Comparison of Biserial R with Pearson R ," *Educational and Psychological Measurement*, XII (Winter, 1952), 759-66.

Compares biserial r with Pearson r for empirical data. Considers some of the factors that will produce discrepancies between the two estimates of the correlation and indicates the extent of these discrepancies.

741. EDWARDS, ALLEN L., and THURSTONE, L. L. "An Internal Consistency Check for Scale Values Determined by the Method of Successive Intervals," *Psychometrika*, XVII (June, 1952), 169-80.

An internal consistency check for scale values determined by the method of successive intervals is described and illustrated. Comparisons are made with internal-consistency checks for paired-comparison data.

742. ENGELHART, MAX D., and THOMAS, MACKLIN. "A Procedure for Transforming Scores Unique to Part of a Student Population to the Scale of a Common Examination Taken by the Entire Student Population," *Educational and Psychological Measurement*, XIII (Summer, 1953), 248-63.

Describes in detail the procedure employed at the Chicago City Junior College for obtaining weighted sums of a general examination and examinations from each of the three branches of the college.

743. FLANAGAN, JOHN C. "The Effectiveness of Short Methods for Calculating Correlation Coefficients," *Psychological Bulletin*, XLIX (July, 1952), 342-48.
Discusses the selection of a suitable short method of calculating correlation coefficients for a particular problem, indicates the time required to use the various methods, and presents empirical data on the relative accuracy of these methods as compared with the longer product-moment computational procedure.
744. GORDON, MORDECAI H.; LOVELAND, EDWARD H.; and CURETON, EDWARD E. "An Extended Table of Chi-Square for Two Degrees of Freedom, for Use in Combining Probabilities from Independent Samples," *Psychometrika*, XVII (September, 1952), 311-16.
"A table of values of chi-square for two degrees of freedom corresponding to values of P from .001 to .999 is presented, together with a description and an example of its use in combining probabilities from two or more independent samples to obtain an aggregate probability."
745. GOURLAY, NEIL. "Covariance Analysis and Its Application in Psychological Research," *British Journal of Statistical Psychology*, VI (May, 1953), 25-34.
Reviews the main uses of the analysis of covariance with special reference to its applications in psychological research.
746. GUILFORD, J. P. "The Correlation of an Item with a Composite of the Remaining Items in a Test," *Educational and Psychological Measurement*, XIII (Spring, 1953), 87-93.
Presents a special formula for estimating the correlation of an item with the score on the remaining items. Four abaci based on this formula are given to provide solutions under a wide range of conditions.
747. HICK, W. E. "A Note on One-tailed and Two-tailed Tests," *Psychological Review*, LIX (July, 1952), 316-18.
A discussion which expresses a somewhat different point of view from that of Melvin R. Marks ("Two Kinds of Experiment Distinguished in Terms of Statistical Operations," *Psychological Review*, LVIII [May, 1951], 179-84).
748. HOYT, CYRIL J., and STUNKARD, CLAYTON L. "Estimation of Test Reliability for Unrestricted Item Scoring Methods," *Educational and Psychological Measurement*, XII (Winter, 1952), 756-58.
An analysis of variance procedure for estimating the degree of internal consistency of a test when the item scores are not restricted to 1 or 0.
749. HSTI, E. H. "Nomograph for Tetrachoric r ," *Educational and Psychological Measurement*, XIII (Summer, 1953), 339-46.
Constructs a nomograph to aid in the computation of tetrachoric correlations.
750. KOGAN, LEONARD S. "Variance Designs in Psychological Research," *Psychological Bulletin*, L (January, 1953), 1-40.
A survey of the major types of experimental design involving analysis of variance which have characterized psychological research during recent years. The author comments on the appropriateness of the design or analysis in some instances and discusses general considerations in application of variance design and analysis. A bibliography of 133 items is appended.
751. LAWSHE, C. H., and NAGLE, BRYANT F. "A Note on the Combination of Ratings on the Basis of Reliability," *Psychological Bulletin*, XLIX (May, 1952), 270-73.
An evaluation, from the point of view of practical application, of several methods of combining ratings on the basis of their reliability.
752. LORD, FREDERIC M. "Notes on a Problem of Multiple Classification," *Psychometrika*, XVII (September, 1952), 297-304.

Develops a solution "in implicit form for the problem of assigning N men to n jobs, the proportion of men to be assigned to each job being specified in advance."

753. LORD, FREDERIC M. "An Application of Confidence Intervals and of Maximum Likelihood to the Estimation of an Examinee's Ability," *Psychometrika*, XVIII (March, 1953), 57-76.

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754. LYERLY, SAMUEL B. "The Average Spearman Rank Correlation Coefficient," *Psychometrika*, XVII (December, 1952), 421-28.

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755. MICHAEL, WILLIAM B., and PERRY, NORMAN C. "The Prediction of Membership in a Trichotomous Dependent Variable from Scores in a Continuous Independent Variable," *Educational and Psychological Measurement*, XII (Autumn, 1952), 368-91.

Formulas are developed for finding the probability that an individual with a known score on the continuous independent variable will be in a designated category of the trichotomous dependent variable and for finding the critical score on the continuous independent variable given the probability of an individual's being in a designated category of the trichotomous dependent variable. Numerical examples are included.

756. MICHAEL, WILLIAM B.; PERRY, NORMAN C.; and GUILFORD, J. P. "The Estimation of a Point Biserial Coefficient of Correlation from a Phi Coefficient," *British Journal of Psychology—Statistical Section*, V (November, 1952), 139-50.

A formula is developed relating the point biserial correlation to the phi coefficient. The degree of systematic error in the formula is discussed. An illustrative example in the field of item analysis is included.

757. MICHAEL, WILLIAM B.; PERRY, NORMAN C.; and HERTZKA, ALFRED F. "Systematic Error in Estimates of Tetrachoric R ," *Educational and Psychological Measurement*, XII (Autumn, 1952), 515-24.

A procedure is developed and illustrated for estimating the amount of systematic error introduced through the use of a formula relating the tetrachoric correlation and the phi coefficient. Tables are included for selected values of the various parameters in the formula. (See also Item 761 in this list.)

758. MOSES, LINCOLN E. "A Two-Sample Test," *Psychometrika*, XVII (September, 1952), 239-47.

Offers a procedure, based on ranks, for testing the difference between an experimental group and a control group in case the experimental condition is likely to affect the scores of some of the subjects in one direction and the scores of some of the subjects in the opposite direction.

759. NIVEN, JAROLD R. "A Comparison of Two Attitude Scaling Techniques," *Educational and Psychological Measurement*, XIII (Spring, 1953), 65-76.

Investigates and compares two attitude scaling methods, the Reciprocal Averages Scaling Technique and Guttman's Cornell Scale Analysis.

760. OSGOOD, CHARLES E., and SUCI, GEORGE J. "A Measure of Relation Determined by Both Mean Difference and Profile Information," *Psychological Bulletin*, XLIX (May, 1952), 251-62.

Describes a method for analyzing interrelations among variables which takes into account not only the profile similarity among the sets of measures but also their

mean differences. (See also Item 764 in this list.)

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A formula is developed for estimating a tetrachoric coefficient of correlation from a phi coefficient that is computed from use of extreme groups of equal, but variable, proportions of the total criterion group.

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A simplified method which facilitates the determination of the proportion of the differences between scores on a pair of tests that cannot be accounted for by chance.

763. TYLER, FRED T. "Some Examples of Multivariate Analysis in Educational and Psychological Research," *Psychometrika*, XVII (September, 1952), 289-96.

Describes and illustrates procedures for answering the following questions: (1) Could two groups of subjects have arisen from the same population? (2) If not, is it possible to classify a given individual into either of the two populations mentioned in the first question? (3) If so, into which of the two populations is the individual best classified?

764. WEBSTER, HAROLD. "A Note on Profile Similarity," *Psychological Bulletin*, XLIX (September, 1952), 538-39.

Suggests other approaches to the problem raised by Osgood and Suci (see Item 760 in this list).

765. WESMAN, ALEXANDER G., and KERNAN, JOHN P. "An Experimental Comparison of Test-Retest and Internal Consistency Estimates of Reliability with Speeded Tests," *Journal of Educational Psychology*, XLIII (May, 1952), 292-98.

A comparison of four measures of reliability computed for each of nine parts, three sub-total scores, and the total score of the General Clerical Test. The four measures of reliability are test-retest, split-half, Kuder-Richardson (20) and Kuder-Richardson (21).

PROBLEMS OF TEST CONSTRUCTION

766. ALLISON, ROGER B., JR. "Battery Validity as a Function of the Time Devoted to Each Test," *Educational and Psychological Measurement*, XIII (Summer, 1953), 288-96.

Summarizes some theoretical studies on properties of a test battery that are a function of the testing time for each test in the battery, and reports an empirical study dealing with battery validity and testing time.

767. ANASTASI, ANNE. "An Empirical Study of the Applicability of Sequential Analysis to Item Selection," *Educational and Psychological Measurement*, XIII (Spring, 1953), 3-13.

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768. ANDERSON, SCARVIA B. "Sequence in Multiple Choice Item Options," *Journal of Educational Psychology*, XLIII (October, 1952), 364-68.

Presents a table to assist the test constructor in randomizing the options in preparing five-choice test items. Describes five situations in which, the author suggests, randomization should not be used.

769. BUDD, WILLIAM C. "A Simplified Item Analysis Card for High-School and College Instructors," *Journal of Education-*

al Psychology, XLIV (January, 1953), 54-56.

Suggests a card form on which instructors can keep a record of the difficulty and discrimination of their multiple-choice items and so have a basis for test revision.

770. COOMBS, C. H. "On the Use of Objective Examinations," *Educational and Psychological Measurement*, XIII (Summer, 1953), 308-10.

Suggests a method of scoring multiple-choice examinations which will discriminate levels of partial knowledge and will yield a greater variance of test scores than does the conventional scoring procedure.

771. CRONBACH, LEE J., and WARRINGTON, WILLARD G. "Efficiency of Multiple-Choice Tests as a Function of Spread of Item Difficulties," *Psychometrika*, XVII (June, 1952), 127-47.

An empirical study, based on hypothetical data, which leads to certain conclusions regarding the relations between test validity and spread of item difficulty.

772. EBEL, ROBERT L. "Maximizing Test Validity in Fixed Time Limits," *Educational and Psychological Measurement*, XIII (Summer, 1953), 347-57.

Illustrates the influence of rate of work on validity by means of empirical data collected in order to investigate the problem: "Given a prescribed testing period of reasonable length and an adequate supply of good items, how many items should be included in the test and how should they be scored to yield maximum validity as rate-free measures?"

773. EWERS, DOROTHEA W. F. "The Test Constructor's Responsibility," *Journal of Educational Psychology*, XLIII (April, 1952), 238-42.

A general discussion of the special qualifications of the test-construction expert who, in any large test-construction outfit, shares responsibility for the final product with the subject-matter expert and the statistician.

774. FELDMAN, MARVIN J. "The Effects of the Size of Criterion Groups and the Level of Significance in Selecting Test Items on the Validity of Tests," *Educational and Psychological Measurement*, XIII (Summer, 1953), 273-79.

Presents empirical data bearing on two problems of test construction: (1) the relation between the size of the criterion group and the amount of shrinkage in validity accruing in cross-validation and (2) the effect of using different levels of significance in selecting discriminating items from the criterion groups.

775. FLEISHMAN, EDWIN A. "A Factor Analysis of Intra-task Performance on Two Psychomotor Tests," *Psychometrika*, XVIII (March, 1953), 45-55.

An application of factorial techniques to scores on several trials of two forms of the Rudder Control Test. The implications of the results for future test development are emphasized.

776. FREDERIKSEN, NORMAN, and SATTER, G. A. "The Construction and Validation of an Arithmetical Computation Test," *Educational and Psychological Measurement*, XIII (Summer, 1953), 209-27.

A complete description of the construction and validation of a test. This article "is presented with no thought that the particular test under consideration is of unusual interest, but rather to illustrate several methods of test construction and validation which are unique or rarely employed and which deserve to be brought to the attention of those interested in test development techniques."

777. GORDON, LEONARD V. "The Effect of Position on the Preference Value of Personality Items," *Educational and Psychological Measurement*, XII (Winter, 1952), 669-76.

Describes an experiment designed to determine whether a response set exists which manifests itself in a tendency for

the response pattern to change systematically during the test situation.

778. HELMSTADTER, GERALD C., and ORTMEYER, DALE H. "Some Techniques for Determining the Relative Magnitude of Speed and Power Components of a Test," *Educational and Psychological Measurement*, XIII (Summer, 1953), 280-87.

Three methods are suggested for assessing the relative importance of speed and power factors in test scores.

779. JONES, T.; HEY, C. G.; and WALL, W. D. "A Group Performance Test and Scale of Intelligence," *British Journal of Educational Psychology*, XXII (November, 1952), 160-72.

Describes the construction, scoring, and validation of a group performance test. The new test consists of the Cube Construction Test and the Kohs Blocks Test.

780. KEISLAR, EVAN R. "Test Instructions and Scoring Method in True-false Tests," *Journal of Experimental Education*, XXI (March, 1953), 243-49.

A study "designed to discover the merits of using the correction formula in true-false tests at the college level when students are informed only as to how the test would be scored" but are not advised whether or not to guess.

781. LORD, FREDERIC M. "The Relation of the Reliability of Multiple-Choice Tests to the Distribution of Item Difficulties," *Psychometrika*, XVII (June, 1952), 181-94.

Gives the formula for the correlation between the score on a multiple-choice test involving a single factor and the underlying ability. Relates this correlation to level and variability of item difficulty.

782. LORGE, IRVING, and KRUGLOV, LORRAINE. "A Suggested Technique for the Improvement of Difficulty Prediction of Test Items," *Educational and Psychological Measurement*, XII (Winter, 1952), 554-61.

A report of an experiment which illustrates the degree of accuracy with which informed judges can predict the difficulty of test items.

783. LORGE, IRVING, and KRUGLOV, LORRAINE. "The Improvement of Estimates of Test Difficulty," *Educational and Psychological Measurement*, XIII (Spring, 1953), 34-46.

Reports a study designed to test the hypothesis that, when judges, experienced as teachers of mathematics on the high-school levels, are informed about the absolute difficulty of a set of items within their teaching field, their estimates of absolute difficulty for unknown items will be improved.

784. SWINEFORD, FRANCES, and MILLER, PETER M. "Effects of Directions Regarding Guessing on Item Statistics of a Multiple-Choice Vocabulary Test," *Journal of Educational Psychology*, XLIV (March, 1953), 129-39.

An investigation of the amount of guessing that is likely to occur on an examination under different instructions to the examinee, the relation between amount of guessing and performance in the area covered by the test, and the effects of guessing on scores and on test statistics and item statistics.

785. SWORDES, ARDIS. "Effect of Changing the Number of Item Responses from Five to Four in the Same Test," *Journal of Applied Psychology*, XXXVI (October, 1952), 342-43.

Shows with actual data the number of marking errors likely to occur in case some test items, but not all, contain four choices instead of five and a standard five-choice answer sheet is provided.

FACTOR ANALYSIS¹

786. ADCOCK, C. J. "A Note on Cluster-directed Analysis," *Psychometrika*, XVII (September, 1952), 249-53.

Discusses methods of locating factor axes directly by correlation clusters.

¹ See also Item 775 (Fleishman) in this list.

787. ALBINO, R. C. "Some Criticism of the Application of Factor Analysis to the Study of Personality," *British Journal of Psychology—General Section*, XLIV (May, 1953), 164-68.
- Criticizes the interpretation and significance which Eysenck gives to results of factor analysis. (See also Item 791 in this list.)
788. BURT, CYRIL. "Tests of Significance in Factor Analysis," *British Journal of Psychology—Statistical Section*, V (June, 1952), 109-33.
- An extensive summary of significance tests which have been proposed in articles, theses, and published researches. Their advantages and limitations are indicated from both a theoretical and a practical point of view.
789. CARROLL, JOHN B. "An Analytical Solution for Approximating Simple Structure in Factor Analysis," *Psychometrika*, XVIII (March, 1953), 23-38.
- Proposes a criterion for an approximation to simple structure based on sums of cross-products of squares of factor loadings. A numerical example is included.
790. CATTELL, RAYMOND B. "The Three Basic Factor-analytic Research Designs—Their Interrelations and Derivatives," *Psychological Bulletin*, XLIX (September, 1952), 499-520.
- Defines and describes six primary factor-analytic experimental designs, which reduce to what the author calls "three independent common matrix pairs."
791. EYSENCK, H. J. "The Application of Factor Analysis to the Study of Personality: A Reply," *British Journal of Psychology—General Section*, XLIV (May, 1953), 169-72.
- The author defends his position with respect to his use of factor analysis following a criticism printed in the same issue of the *Journal*. (See Item 787 in this list.)
792. GIBSON, W. A. "Orthogonal and Oblique Simple Structures," *Psychometrika*, XVII (September, 1952), 317-23.
- Develops and illustrates numerically a quick approximation of the best-fitting orthogonal simple structure from the known oblique simple structure. (See also Item 793 in this list.)
793. GREEN, BERT F. "The Orthogonal Approximation of an Oblique Structure in Factor Analysis," *Psychometrika*, XVII (December, 1952), 429-40.
- Presents three methods for obtaining an orthogonal factor matrix which closely approximates a given oblique factor matrix. (See also Item 792 in this list.)
794. GUTTMAN, LOUIS. "Multiple Group Methods for Common-Factor Analysis: Their Basis, Computation, and Interpretation," *Psychometrika*, XVII (June, 1952), 209-22.
- Explains three basic theorems used in factor theory. The meaning of common-factor analysis is given in terms of the basic theorems, as well as the relation to "inverted" factor theory.
795. KNOELL, DOROTHY M., and HARRIS, CHESTER W. "A Factor Analysis of Spelling Ability," *Journal of Educational Research*, XLVI (October, 1952), 95-111.
- Several scores obtained from two kinds of tests of spelling ability are subjected to factor analysis. The study is repeated for a group of sixty-eight sixth-grade girls and a group of seventy-four eleventh- and twelfth-grade pupils.
796. MOURS, E. M. "The Hierarchical Organization of Cognitive Levels," *British Journal of Psychology—Statistical Section*, V (November, 1952), 151-80.
- Applies several factorial procedures to the table of intercorrelations of twenty mental tests in order to test Burt's hypothesis of a hierarchical structure.
797. PEMBERTON, CAROL. "The Closure Factors Related to Other Cognitive Proc-

esses," *Psychometrika*, XVII (September, 1952), 267-88.

A factor analysis of twenty-five speeded group tests administered to 154 graduate and undergraduate students. The purpose of the study was "to ascertain whether abilities on speed of closure and flexibility of closure tests generalize to other domains." This paper deals with "generalization of the closure factors to tasks requiring higher cognitive functions."

798. RYANS, DAVID G. "A Study of Criterion Data (A Factor Analysis of Teacher Behaviors in the Elementary School)," *Educational and Psychological Measurement*, XII (Autumn, 1952), 333-44.

The application of factorial methods to a battery of criterion measures. This study is one of a series of related investigations being conducted in connection with the Teacher Characteristics Study.

799. RYANS, DAVID G., and WANDT, EDWIN. "A Factor Analysis of Observed Teacher Behaviors in the Secondary School: A Study of Criterion Data," *Educational and Psychological Measurement*, XII (Winter, 1952), 574-86.

A battery of twenty-five traits revealed in the classroom behaviors of teachers and pupils in the fields of mathematics, science, English, and social studies is submitted to factorial analysis. This study is one of a series of related investigations being conducted in connection with the Teacher Characteristics Study.

800. SANAI, M. "An Empirical Study of Political, Religious, and Social Attitudes," *British Journal of Psychology—Statistical Section*, V (June, 1952), 81-92.

Reports a factor analysis of a thirty-item questionnaire. The correlations were factorized by Burt's Method of Simple Summation.

801. SANDLER, JOSEPH. "A Technique for Facilitating the Rotation of Factor Axes, Based on an Equivalence be-

tween Persons and Tests," *Psychometrika*, XVII (June, 1952), 223-29.

Suggests a technique whereby "test-equivalents" of persons can be included in the factor space as an aid both to rotating to simple structure and to interpreting the resulting solution.

802. STEPHENSON, WILLIAM. "Some Observations on *Q* Technique," *Psychological Bulletin*, XLIX (September, 1952), 483-98.

A clarification of the fundamental distinctions between the *R* technique and the *Q* technique of factor analysis.

803. TORGERSON, WARREN S., and GREEN, BERT F., JR. "The Factor Analysis of Subject-Matter Experts," *Journal of Educational Psychology*, XLIII (October, 1952), 354-63.

An application of factorial-analysis techniques to correlations between twenty readers who each graded thirty-eight selected essays. The centroid solution was rotated to an oblique solution.

804. WRIGLEY, CHARLES. "The Prediction of a Complex Aptitude," *British Journal of Psychology—Statistical Section*, V (June, 1952), 93-104.

Presents and illustrates a method of predicting an aptitude which is measured by a battery of criteria instead of by a single criterion. The procedure appears to be particularly well adapted to the problem of personnel selection.

805. ZIMMERMAN, WAYNE S. "A Revised Orthogonal Rotational Solution for Thurstone's Original Primary Mental Abilities Test Battery," *Psychometrika*, XVIII (March, 1953), 77-93.

Concerned over the abundance of variance in the residual factors of Thurstone's own analysis of his primary mental abilities tests, the author started with Thurstone's final pattern and performed eighty-six additional pair-by-pair rotations. The results are compared with the original solution.

EDUCATIONAL WRITINGS



REVIEWS AND BOOK NOTES

STEPHEN M. COREY, *Action Research To Improve School Practices*. New York 27: Bureau of Publications, Teachers College, Columbia University, 1953. Pp. xii+162. \$3.00.

The problem to which *Action Research To Improve School Practices* is addressed is, "How can school practices best be improved in our type of society?" Few will quarrel with the underlying beliefs that directed Corey's attention to this problem and impelled him to write this book. These beliefs are, in summary:

1. We are now experiencing only the beginnings of the changes that modern science and technology will bring.
2. Schools perform their rightful role only when they increase our ability to adjust to, and to use wisely, this technology.
3. The extensive changes which should be made in school practices can best be made through study and action programs centered in hundreds of thousands of classrooms throughout America.

The volume opens with a critical analysis of current research in education. The author charges that this research is making little difference in classroom procedures. This failure is partly due to the fact that the questions studied are not the same as those that trouble teachers, but a more important reason is that the researchers have not been school practitioners and, conversely, school practitioners have not been researchers. The remedy for this is *action research*, the use of the method of science by thousands of teachers, administrators, and supervisors. This research is to be related directly to the day-by-day activities of the classrooms and schools served.

The action-research process, as analyzed in a second chapter, is seen as a procedure similar to Dewey's concept of the act of thinking. In a subsequent chapter the danger of overformalizing this process is noted, and the reader is wisely cautioned to think of action research as "refined common sense."

Later chapters provide stimulating considerations of the conditions favorable to action research by teachers, the preparation of consultants to assist with such research, and the nature of the statistics needed. These chapters come from an examination of eight years' experience of the author and his associates in assisting schools which conduct action research. Therefore, they merit careful reading.

Because of general agreement with the point of view, this reviewer read this volume with much interest. Curriculum workers and persons engaged in educational research can ill afford to treat lightly the author's criticisms of present attempts to promote educational change. The gap between what is known and what is practiced is far too great for comfort.

The possibility of using action research for accelerating and making more significant our changes in education is considerable. For this reason, Corey's book should be welcomed. But one who has faith in the general idea also has special reason for commenting upon what seem to him weaknesses in the volume.

The book is unevenly written, partly because it is primarily an adaptation of articles written over a period of several years for various journals. The result is that too little attention is given to some major problems and overemphasis is placed upon others.

Perhaps it is not too presumptuous to express the belief that, if the book had been written as a single piece, a much better volume would have been produced. One hopes that out of the work of the institute directed by the author there may come such a volume at an early date.

A second disturbing feature of the book is the unimpressive nature of the two action-research studies that are reported. The first, a study of ways of improving teacher-planning meetings, resulted in some promising, but modest, tentative conclusions. The second, an examination of the influence of the study of American biographies upon student behavior, was based upon hypotheses that should have been discarded through a bit of common-sense reflection. More serious, the devices used for testing results were obviously of doubtful reliability and validity. One doubts that the teachers involved left this project with much enthusiasm for action research.

These critical comments are made not to belittle the efforts of the participants, for their zeal was highly commendable. Rather, the intent is to point out that we are dealing with a difficult method and that, even with the able assistance of an excellent staff such as that of the Horace Mann-Lincoln Institute of School Experimentation, schools do not make quickly such sweeping changes in educational practice as the author thinks are needed.

A final critical note: it is possible that the author's dedication to action research at the grass roots has caused him to be too skeptical of teachers' ability to use the research findings of others. In part, limited ability to act upon the discoveries of others is a characteristic of immaturity. Such immaturity was widely prevalent in the medical profession a half-century ago. Improvements in medical education have done much to lessen this unwarranted attachment to the "tried and true."

Is it not possible that in the profession of education we may also develop such matu-

rity as will enable us to use more readily new ideas and new discoveries no matter what their source? Perhaps to involve teachers more extensively in action research is the most promising way of promoting such maturity. I am ready to accept this view. This desirable state will not, however, develop spontaneously. Rather, we shall do well, as we encourage and direct action-research programs, simultaneously to encourage teachers to read more widely and to make far more use of things that others have learned about the educative process. If in all this we constantly direct attention to the reasons for changing and improving school practice, if we place our activities in the setting of getting ahead with the great task of developing an American school program adequate for this age of science, I believe we can learn to act upon all sound and significant research no matter what its source.

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RAY H. SIMPSON, *Improving Teaching-Learning Processes*. New York 3: Longmans, Green & Co., 1953. Pp. x+488. \$5.00.

"The greatest need of the hour in education is the discovery of ways to shift work from teachers to pupils." This statement by Carrothers of the University of Michigan is quoted (p. 5) with approval by Simpson in his opening chapter as he undertakes the job of explaining in detail his thesis that the primary task of teachers at all levels is to guide learners into becoming self-directive self-educators. This thesis is based on a basic premise that the best education occurs when learners are enabled to identify and solve meaningful problems in their life-situations.

Simpson divides his book into six parts. Part I, comprising chapters i and ii, outlines the assumptions about learning and teaching that guided the writing of this book. He

identifies three kinds of orientations to the teaching-learning process and the assumptions underlying each of these orientations. The author labeled the orientations (1) "common information pattern" (mastery of discrete facts), (2) "common units pattern" (acquisition of bundles of facts), and (3) "common process pattern" (mastery of problem-solving processes).

In Part II, chapters iii-vi, identification of problems of importance to learners and the necessity for developing skill in identifying significant problems are emphasized. Chapter iii points up the practicality of the individual's learning to identify his own problems. Chapters iv and v emphasize the need for teacher-learner planning in the light of the learner's needs and purposes. The intimate relation of problem-solving and the learning process is highlighted in chapter vi.

The author introduces in Part III the concept of "service activities," or procedures which the student must understand and master. Each of chapters vii-xii deals with a service activity: (1) ability to evaluate, (2) competence in self-evaluation, (3) ability to keep a log of individual plans and progress in a learning experience, (4) ability to obtain and use varied resources effectively, (5) development of group membership skills, and (6) mastery of various reading skills necessary for problem-solving.

Part IV, comprising chapters xiii and xiv, presents first a useful overview and assessment of the various teaching plans or methods in common use and then deals with what the author terms "process-related problems." These include the problem of discipline, the development of attitudes, the values and the dangers of both standardized tests and marks, and the problem of insuring effective group-functioning in the classroom.

Chapter xv (Part V) gives a rapid survey of some major researches, especially the Eight-Year Study and the Southern Association Study, which demonstrate the educational soundness of the functional, problem-solving approach of modern education.

Part VI, chapter xvi, points up briefly the challenges teachers have to meet, including that of individual differences, of inculcating a desire for further learning in students, of keeping abreast of latest learning theory, and of constantly adjusting their procedures to student needs and purposes.

This reviewer wholeheartedly subscribes to the principles enunciated by Simpson regarding the teacher's role in facilitating students' learning. These tenets include such ideas as these: the teacher should start from the point at which the learner stands; intrinsic motivation is the *sine qua non* of lasting and usable learning; fact-memorization is a very limited type of learning; students should participate in the planning and implementation of their educational program; learning arises primarily from guided experiencing and doing; and conscious evaluation, especially self-evaluation, is essential for the progress and maturation of the learner.

Nonetheless, the manner in which the message of this book is presented tends to detract from the ideas and philosophy that are stated. Ostensibly, the book is beamed at teachers in service in junior and senior high schools. Actually, it seems to address itself largely to undergraduate students majoring in education. Because of its lengthy and ubiquitous lists of criteria, suggestions, and questions, much of the book gives the impression of being both a course outline and a manual of procedures for future teachers. As such, the book tends to be choppy, difficult to read, and overwhelming to the reader because of its detailing of questions and procedures. Undoubtedly, because of the deep sincerity and singleness of purpose shining through the text, the author can make his material live in the classroom. He certainly does not make it live in his book. Another frailty is the redundancy and sheer repetition throughout the book, even to the extent of reiterating the same analogies to make a point. The bibliographies at the ends of the chapters are not so adequate or up to date,

with the possible exception of those for chapters xi and xiv, as one would like.

With regard to the matter of self-evaluation, the author presents a large number of valuable suggestions for developing this competency in learners. However, the recommendation that the teacher "have each behavior problem child write down on paper his difficulties, problems, sources of dissatisfaction, etc., and evaluate these as to their effect on him" (p. 200) seems highly unrealistic to this reviewer. Likewise, a suggestion regarding sociograms, if taken literally by the teacher, could be very damaging to the learners concerned:

After the results of such [sociometric] questions have been ascertained, the teacher with the help of the learners may develop sociograms that will reveal isolates and other individuals who probably need special help [p. 336].

The book, in ranging over a gamut of issues from group dynamics in the classroom, through reading and evaluation, to problems of discipline; in presenting too many lengthy lists of bases for action and suggestions; and in repetition of concepts and examples, gives this reviewer the impression of spotty and uneven merit. Yet, because of its broad scope, the strength of conviction with which the tenets of modern education are enunciated, and the specificity of operational techniques that are presented, the volume may prove of value as a resource book to both teacher-practitioners and teachers in training.

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BYRON S. HOLLINSHEAD, *Who Should Go to College*, with a chapter on the role of motivation in attendance at post-high-school educational institutions by ROBERT J. HAVIGHURST and ROBERT R. RODGERS. New York 27: Columbia University Press, 1952. Pp. xvi+190. \$3.00.

Who Should Go to College was published for the Commission on Financing Higher Education, which is under the sponsorship of the Association of American Universities. The volume purposes to investigate the reasons why some of those persons who should go to college do not and "to make some estimate of the number of young people for whom a college education would be an advantage, both to themselves and to society" (p. 5).

The book is a preliminary study of the problem of developing more fully our human resources. Separate chapters deal with the following topics:

1. Who now goes to college?
2. What determines their going?
3. Who should go among those not now going?
4. What measures are necessary to get more of the high-ability group to go?
5. How can we provide for this, and what would it cost?

An introductory section suggests the complexity of our school problem and the infinite variety characterizing our school system. Chapters ii and iii offer a quantitative description of some of the main factors relating to college attendance. Reasons for, and decisions concerning, attending college depend in part upon such tangible factors as academic ability, race, sex, geography, family income, and social status. But attendance also depends upon certain intangible factors which may be equally operative but which cannot be explained in a statistical manner. Among such factors are the motivation of the individual, the nature of the educational institution he can attend, the influences that colleges bring to bear, society's demands upon its younger generation at a given period, and the competition of various alternatives to a college education.

The authors of the book do not state precisely how many young people should attend college, but they take the position that society should educate its top talent—the top 25 per cent in ability, which in the normal distribution of intelligence is about the per

cent of the age group who have intelligence quotients above 110. They propose too that those whose ability insures a reasonable chance of success in college should have an opportunity to attend. Such a proposal insures, to some extent at least, that we shall not overlook any persons with high academic ability and also that in many situations there will be a sizable group both of intellectual leaders and of followers who can interpret the thought of the leaders to the group. The projections showing who might attend college relate to four groups: (1) the non-high-school graduates, (2) the non-motivated high-school graduates, (3) the non-financed high-school graduates, (4) high-school graduates who do not go to college because they "have other plans."

The factors that help or hinder college attendance on the part of able students receive attention, as do some estimates of what financial assistance might be expedient to train those persons whose contribution to society might be greater if they were better educated. Two answers pertaining to educa-

tion at the college level are offered: (1) a national program in the form of scholarships to provide an opportunity for those who can derive benefit from an advanced type of liberal and technical education; (2) an extension of the present high school to include the community college and to be financed by the localities and states. Thus, those with ability below the stage considered desirable for a four-year college would likewise have an opportunity to obtain free or low-cost education beyond high school. Obviously, these suggestions would help equalize the educational opportunities for all high-school graduates.

The volume concludes with a chapter on "The Role of Motivation in Attendance at Post-High-School Educational Institutions," by Robert J. Havighurst and Robert R. Rodgers, of the University of Chicago, followed by selections from the relevant literature.

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CURRENT PUBLICATIONS RECEIVED

METHOD, HISTORY, THEORY, AND PRACTICE

BARTKY, JOHN A. *Supervision as Human Relations*. Boston: D. C. Heath & Co., 1953. Pp. xii+308. \$4.00.

BLITSTEN, DOROTHY R. *The Social Theories of Harry Stack Sullivan: The Significance of His Concepts of Socialization and Acculturation, Digested from His Various Papers and Integrated as a Selection for Social Scientists*. New York 1: William-Frederick Press, 1953. Pp. 186. \$3.50.

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MELAND, BERNARD EUGENE. *Higher Education and the Human Spirit*. Chicago 37: University of Chicago Press, 1953. Pp. x+204. \$4.00.

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MORTON, JOHN R. (director). *University Extension in the United States*. A Study by the National University Extension Association, Made with the Assistance of a Grant from the Fund for Adult Education. University, Alabama: University of Alabama Press, 1953. Pp. x+144. Cloth, \$2.25; paper, \$1.00.

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BOOKS FOR HIGH-SCHOOL TEACHERS AND PUPILS

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HESTON, JOSEPH C. *How To Take a Test*. Life Adjustment Booklet. Chicago 10: Science Research Associates, Inc., 1953. Pp. 48. \$0.40.

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SMITH, AUGUSTUS H., and PATTERSON, S. HOWARD. *Economics for Our Times*. New York 36: McGraw-Hill Book Co., Inc., 1953 (second edition). Pp. xii+534. \$3.72.

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Developments in Education. Florida State University Studies, No. 9. Tallahassee: Florida State University, 1953. Pp. 118. \$1.00.

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- Managing the School District Insurance Program*. Published with the co-operation of the Office of Education, U.S. Department of Health, Education, and Welfare. Washington 6: American Association of School Administrators, National Education Association, 1953. Pp. 24. \$0.50.
- MANN, GEORGE C., and GETSINGER, J. WILSON. *Development of Adult Education in California*. Bulletin of the California State Department of Education, Vol. XXII, No. 6. Sacramento, California: State Department of Education, 1953. Pp. viii+88.
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- Official Aquatics, Winter Sports and Outing Activities Guide, July, 1953-July, 1955*. Edited by PRUDENCE FLEMING and DONNA MAE MILLER. Washington 6: American Association for Health, Physical Education, and Recreation, 1953. Pp. 160. \$0.75.
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